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This publication provides detailed statistical data on degrees in science and engineering fields by the race/ethnicity of recipients from 1989-1997. Bachelor's and master's degree data were obtained from the universe institution surveys of the National Center for Education Statistics (NCES), U.S. Department of Education. Data on doctorates are from the Survey of Earned Doctorates, a university survey of individual doctorate recipients sponsored by the National Science Foundation (NSF) and four other federal agencies. The estimates of population in the various age categories are based on data that was collected and published by the Bureau of the Census, U.S. Department of Commerce. Sections include: (1) "Technical Notes"; (2) "Detailed Statistical Tables"; (3) "Classification of Programs"; and (4) "Getting Information on the World Wide Web." (CCM)



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Science and Engineering Degrees, by Race/Ethnicity of Recipients:

1989 - 97

Detailed Statistical Tables

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Division of Science Resources Studies Directorate for Social, Behavioral, and Economic Sciences





Science and Engineering Degrees, by Race/Ethnicity of Recipients:

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Detailed Statistical Tables

Susan T. Hill, Author

Division of Science Resources Studies
Directorate for Social, Behavioral, and Economic Sciences



National Science Foundation

February 2000

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5

Contents

Section	Page
ACKNOWLEDGMENTS	iii
General Notes	1
SECTION A. TECHNICAL NOTES	3
SECTION B. DETAILED STATISTICAL TABLES	7
SECTION C. CLASSIFICATION OF PROGRAMS	79
GETTING INFORMATION ON THE WORLD WIDE WEB	
Order Form	



GENERAL NOTES

This publication is based on data obtained from two surveys. Bachelor's and master's degree data were collected by the National Center for Education Statistics, U.S. Department of Education, from all accredited institutions of higher education. Data on doctorates are from Survey of Earned Doctorates, a universe survey of individual doctorate recipients that is sponsored by the National Science Foundation (NSF) and four other Federal agencies.

These data cover earned degrees conferred in the aggregate United States, which includes the 50 States, the District of Columbia, and the U.S. Territories and Outlying Areas (American Samoa, the former Canal Zone, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Trust Territory of the Pacific Islands). Degree data are compiled for a 12-month period, July of one year through June of the following year. For convenience, degrees for such a given 12-month period will be referred to by the year in which the period ended, e.g., 1997 means the 12-month period ending June 1997.

Because racial/ethnic data were collected by broad fields of study only (until 1995), the definition of science and engineering used by NSF for this trend report must include fields normally not included. There is one instance where this difference has a large impact—the broad field of "Social Sciences." The U.S. Department of Education includes the field of history in this broad category, so when

it collected the racial/ethnic data up until 1995, this field was included in the "Social Sciences" and comprised 20-23 percent of the "Social Sciences" category for bachelor's and master's degree data.

If the reader is interested in earlier data for science fields, please request Science and Engineering Degrees, by Race/Ethnicity of Recipients: 1977-91, NSF 94-306. Please note, however, that before 1985, the broad category of "Engineering" included engineering technologies. This report excludes engineering technologies so that trend data by race/ethnicity are more consistent with the definition of science and engineering used in other NSF reports. However, the reader can use tables 31 and 32 to add in these data so as to correspond to the earlier report (NSF 94-306).

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SECTION A. TECHNICAL NOTES



Introduction

This report is based on final data from two Federal surveys. The first is the U.S. Department of Education's Completions Survey conducted annually by the National Center for Education Statistics (NCES) as part of the Integrated Postsecondary Education Data System (IPEDS). The second is the Survey of Earned Doctorates, conducted annually for the National Science Foundation (NSF) and four other Federal agencies. Each source is described in more detail in the following sections.

Data from the Completions Survey were used to report the number of bachelor's and master's degrees. The data on doctoral degrees in this report were derived from the Survey of Earned Doctorates, which surveyed all individuals earning research doctorates, rather than from the Completions Survey, which surveyed the institutions awarding the doctorates. The Survey of Earned Doctorate data were preferred because the data provided by individuals are more specific with respect to the field of specialization and are less likely to contain errors in data reporting and data entry than are the aggregate data provided by institutions. Furthermore, doctorate data provide 100 percent coverage for data by field and sex of individual recipients, whereas institutional data are subject to imputation for nonresponse. For a comparison of reporting on doctoral degrees in the Completions Survey and the Survey of Earned Doctorates, see National Science Foundation, Science and Engineering Doctorates: 1960-91, NSF 93-301, Detailed Statistical Tables (Washington, DC, 1993).

In this report, the racial and ethnic categories among U.S. citizens (and permanent resident aliens), who were degree recipients during the 1989–97 period, are charted and tabulated.

The following five racial/ethnic categories were the standard in Federal Government surveys of institutions in this reporting period:

- Black, non-Hispanic
- American Indian or Alaskan Native
- Asian or Pacific Islander
- Hispanic
- White, non-Hispanic

Persons who are U.S. citizens or foreign citizens admitted for permanent residence are classified into the above categories. The ethnic category of Hispanic took precedence over the racial categories in the data

collection. In addition, nonresident aliens, i.e., those admitted to the United States for temporary residence, are separately identified as a sixth category in the survey. The nonresident aliens are not to be reported in the aforementioned racial/ethnic groups.

The definitions for the racial/ethnic categories used in the survey are as follows:

Nonresident alien—A person who is not a citizen or national of the United States and who is in this country on a temporary basis and does not have the right to remain indefinitely. Resident aliens who are not citizens of the United States and who have been lawfully admitted for permanent residence (and who hold alien registration receipt cards—Form I-551/155) are to be reported in the appropriate racial/ethnic categories along with U.S. citizens.

Black, Non-Hispanic—A person having origins in any of the black racial groups of Africa (except those of Hispanic origin).

American Indian or Alaskan Native—A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition.

Asian or Pacific Islander—A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. These areas include, for example, China, Japan, Korea, the Philippine Islands, and Samoa.

Hispanic—A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

White, Non-Hispanic—A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin).

Bachelor's and Master's Degree Data

Bachelor's and master's degree data presented in this report were derived from a survey conducted by NCES—the Completions Survey.

This survey requested data on the number of associate's, bachelor's, master's, doctoral, and first-



professional degrees conferred by institutions of higher education. The data were requested according to sex of recipient and field of study for each degree level. Data on the race/ethnicity of degree recipients were collected biennially by NCES for the Office of Civil Rights from 1987 through 1989 and annually since then. A limitation has been that data were collected only at the broad field level¹ (until 1995) according to the Federal racial/ethnic designations of degree recipients. This has affected one field primarily—Social Sciences. Social Sciences includes History in this report, for bachelor's and master's degree data. History comprises 20-23 percent of the Social Sciences total.

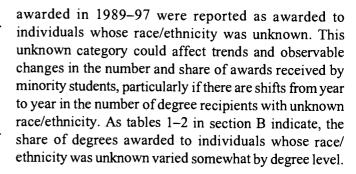
The surveys were mailed to all accredited universities and colleges in the United States, including the U.S. territories, for completion by the institution. Followup for nonresponse and editing was conducted by letter and telephone. The overall response rate for institutions of higher education ranged between 94 and 97 percent between 1989 and 1997.

For the bachelor's and master's degree data, the manner of collecting racial and ethnic data is left to the discretion of the institution, provided that the system established results in reasonably accurate data. The information is gathered by NCES for the Office of Civil Rights, U.S. Department of Education, in compliance with title I of the Civil Rights Act of 1964 and title IX of the Education Amendments of 1972.

For institutions that did not report any racial/ethnic data by field, NCES imputed data on the basis of an earlier response for each institution, if available. Table A-1 indicates percentage of 1997 degree recipients in each race/ethnicity category for which race/ethnicity was imputed.

In examining data on degrees awarded to minorities, it must be noted that 1 to 5 percent of all S&E degrees

Table A-1. Percent of bachelor's and master's degree recipients imputed, by race/ethnicity: 1997 Race/ethnicity Bachelor's Master's White..... 0.6% 1.2% Black.... 0.5 8.0 Hispanic..... 0.9 1.8 Asian or Pacific Islander..... 3.0 1.4 American Indian or Alaskan Native... 0.4 1.6 Nonresident alien..... 2.6 3.3 Unknown. 4.7 1.1



This NSF report differs from those published by NCES in that data for the U.S. territories, and the commonwealth of Puerto Rico are included, whereas NCES excludes them from most of its published reports. This affects the data for Hispanics primarily, since institutions in Puerto Rico are included.

DOCTORAL DEGREE DATA

In the Survey of Earned Doctorates, information is collected during the period of July 1 of one year to June 30 of the next from all persons who have fulfilled the requirements for a research doctorate. The survey is funded jointly by NSF and four other agencies: the U.S. Department of Education, the National Institutes of Health, the National Endowment for the Humanities, and the U.S. Department of Agriculture. The survey forms were sent to all accredited doctorate-granting institutions for distribution by the graduate deans to all research doctorate recipients as they complete degree requirements. Information collected in the survey comprises demographic data, such as the student's sex, citizenship, ethnicity, and racial group; education history, including field of degrees; sources of graduate student support; employment status during the year preceding receipt of the doctorate; postgraduation plans; and background on parents' education. Approximately 92-95 percent of the doctorate recipients complete and return the survey forms. For nonrespondents, commencement programs constituted a source of skeletal information that was added to the file. These variables were sex, field of study, institution, year of doctorate, and educational background. Nonresponse for race/ethnicity is not imputed for individuals, but the percent unknown has been low (around 1-2 percent of those with known citizenship; citizenship was unknown for 2-8 percent of degree recipients). Since changes in non-response do exist, small changes in numbers should be interpreted with caution, especially for 1997. Data are updated annually from completed survey forms submitted belatedly by previous nonrespondents, so numbers may change slightly in the future updates.



SOURCE: NCES, IPEDS Completions file, 1997

¹Broad field level refers to the 2-digit program levels in U.S. Department of Education, National Center for Education Statistics, Classification of Instructional Programs (Washington, DC: GPO, 1991).

SECTION B.

DETAILED STATISTICAL TABLES



LIST OF TABLES

Tab	le	Page
1.	Percentage distribution of earned bachelor's degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1989–97	13
2.	Percentage distribution of earned master's degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1989–97	14
3.	Percentage distribution of earned doctoral degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1989–97	15
4.	Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of recipient: 1989–97	16
5.	Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of male recipients: 1989–97	20
6.	Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of female recipients: 1989–97	24
7.	Number of earned master's degrees, by field and by citizenship and race/ethnicity of recipient: 1989–97	28
8.	Number of earned master's degrees, by field and by citizenship and race/ethnicity of male recipients: 1989–97	32
9.	Number of earned master's degrees, by field and by citizenship and race/ethnicity of female recipients: 1989–97	36
10.	Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of recipient: 1989–97	40
11.	Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of male recipients: 1989–97	44
12.	Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of female recipients: 1989–97	48
13.	Number and percent of bachelor's degrees earned by blacks which are conferred by historically black colleges and universities (HBCUs), by field: 1989–97	52
14.	Number and percent of bachelor's degrees earned by black men which are conferred by historically black colleges and universities (HBCUs), by field: 1989–97	53
15.	Number and percent of bachelor's degrees earned by black women which are conferred by historically black colleges and universities (HBCUs), by field: 1989–97	54



Table Page 16. Number and percent of master's degrees earned by blacks which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97..... 55 17. Number and percent of master's degrees earned by black men which are conferred by historically black colleges and universities (HBCUs), by field: 1989–97 56 18. Number and percent of master's degrees earned by black women which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97 57 Number and percent of doctoral degrees earned by blacks which are conferred 19. by historically black colleges and universities (HBCUs), by field: 1989–97..... 58 20. Number and percent of doctoral degrees earned by black men which are conferred by historically black colleges and universities (HBCUs), by field: 1989–97..... 59 21. Number and percent of doctoral degrees earned by black women which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97 60 22. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1989–97. 61 23. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1989–97 62 24. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1989–97 25. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1989–97 64 26. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1989–97 27. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1989–97.... 66 Number of earned doctoral degrees conferred by institutions in Puerto Rico to 28. Hispanics, by field: 1989–97 29. Number of earned doctoral degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1989–97 68 30. Number of earned doctoral degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1989–97 69 Number of earned bachelor's degrees awarded in engineering technologies, by 31. citizenship, race/ethnicity and sex of recipient: 1989–97 70



333

Tab	le	Page
32.	Number of earned master's degrees awarded in engineering technologies, by citizenship, race/ethnicity and sex of recipient: 1989–97	. 71
33.	Number of earned bachelor's degrees awarded in health fields, by citizenship, race/ethnicity and sex of recipient: 1989–97	72
34.	Number of earned master's degrees awarded in health fields, by citizenship, race/ethnicity and sex of recipient: 1989–97	73
35.	Number of earned doctoral degrees awarded in health fields, by citizenship, race/ethnicity and sex of recipient: 1989–97	74
36.	First-professional degrees awarded, by citizenship, race/ethnicity and sex of recipient: 1989–97	75
37.	First-professional degrees awarded in health fields, by citizenship, race/ethnicity and sex of recipient: 1989–97	76
38.	First-professional degrees awarded in non-health fields, by citizenship,	77



Table 1. Percentage distribution of earned bachelor's degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1989-97

		1	1		- 1						
Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997		
		1			Total						
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
U.S. citizens and permanent residents, total 1	96.3	96.4	96.4	96.8	96.4	96.5	96.3	96.3	96.4		
White, non-Hispanics	79.1 5.7	78.1 5.6	78.0 5.8	77.6 6.0	76.5 6.3	75.3 6.7	73.7 7.3	72.7 7.6	71.5 8.1		
AsiansUnderrepresented minorities, total	9.5	9.7	10.3	11.0	11.5	12.3	13.0	13.6	14.2		
Black, non-Hispanics	5.2	5.3	5.6	6.0	6.3	6.6	6.9	7.2	7.4		
Hispanics	3.9	4.0	4.3	4.6	4.7	5.2	5.6	5.9	6.2		
American Indians or Alaskan Natives	.4	.4	.4	.4	.5	.5	.5	.6	.6		
residents, unknown race/ethnicity	2.1	3.0	2.4	2.1	2.1	2.2	2.3	2.4	2.6		
Nonresident aliens 2	3.7	3.6	3.6	3.2	3.6	3.5	3.7	3.7	3.6		
	Men										
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
U.S. citizens and permanent residents, total 1	95.4	95.5	95.5	96.0	95.6	95.6	95.4	95.5	95.5		
White, non-Hispanics	79.8	78.9	78.8	78.5	77.5	76.3	74.8	73.8	72.8		
Asians	5.8	5.8	5.9		6.6	6.9		7.9	8.4		
Underrepresented minorities, total	7.9	8.0	8.5		9.4	10.2		11.3	11.7		
Black, non-Hispanics	3.9	3.9	4.2	4.5	4.7	5.0		5.4	5.6		
HispanicsAmerican Indians or Alaskan Natives	3.7 .3	3.7 .3	3.9 .3	4.2	4.3	4.7 .5	5.1	5.4 .5	5.6 5.		
U.S. citizens and permanent residents, unknown race/ethnicity	1.9	2.9	2.4	2.2	2.2	2.2	2.4	2.6	2.6		
Nonresident aliens 2	4.6	4.5	4.5	4.0	4.4	4.4	4.6	4.5	4.5		
					Women						
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
	1					İ					
U.S. citizens and permanent residents, total ¹	97.6	97.7	97.6	97.7	97.5	97.5	97.4	97.3	97.3		
White, non-Hispanics	78.1	77.2	77.0			74.0		71.4	70.0		
Asians	5.5	5.4	5.5			6.4		7.4	7.8		
Underrepresented minorities, total	11.7	12.0	12.7			15.0		16.2 9.2	17.0 9.5		
Black, non-Hispanics	7.0	7.1 4.4	7.4 4.8			8.7 5.8		9.2 6.4	6.8		
HispanicsAmerican Indians or Alaskan Natives	4.3	4.4	4.8			3.6			0.		
U.S. citizens and permanent		.*	٠,٠		1 .3		Ί				
residents, unknown race/ethnicity	2.4	3.1	2.4	2.1	2.1	2.1	2.3	2.3	2.5		
Nonresident aliens ²	2.4	2.3	2,4	2.3	2.5	2.5	2.6	2.7	2.7		

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

NOTES: Details may not sum to totals due to rounding.

Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in science and engineering.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics; Integrated Postsecondary Education Data System Completions Survey



² Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

Table 2. Percentage distribution of earned master's degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1989-97

1989	1000							
	1990	1991	1992	1993	1994	1995	1996	1997
				Total				
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
78.5	77.4	76.6	76.4	75.3	75.7	75.9	76.8	76.8
62.5 5.8	61.5 5.6	61.1	59.9	58.9	58.9	58.1	58.4	58.0
4.9 2.3	5.0 2.6	5.5 2.9	5.7 3.1	6.0 3.1	6.5 3.3	7.0 3.8	6.7 7.4 4.0	6.7 8.1 4.4
.3	.3	2.4 .3	2.4 .3	2.6 .3	2.9 .3	2.9 .3	3.1 .3	3.3 .4
5.3	5.2	4.0	4.5	4.4	4.0	4.3	4.4	4.0
21.5	22.6	23.4	23.6	24.7	24.3	24.1	23.2	23.2
				Men				
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
74.8	73.8	72.6	72.5	71.1	71.6	71.3	72.8	72.4
58.9	58.3	57.9	56.5	55.5	55.6	54.6	55.7	55.4
4.2 1.8 2.0	4.1 2.0 2.0	4.5 2.2 2.1	4.7 2.3 2.1	5.0 2.4 2.4	5.3 2.5 2.6	5.6 2.7 2.6	5.8 2.8 2.7	6.6 6.5 3.1 3.0
5.5	5.5	4.1	.2 4.7	.2 4.5		.3 4.4		.3 3.9
25.2	26.2	27.4	27.5	28.9	28.4	28.7	27.2	27.6
				Women				
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
86.3	84.7	84.2	83.7	83.1	83.3	83.8	83.4	83.5
70.0 5.1	68.1 5.3	67.3 5.4	66.4 5.6	65.3	64.9	64.2	62.7	61.9 6.9
6.4 3.4 2.7	6.8 3.8	7.6 4.2	7.6 4.5	8.0 4.6	8.7 4.8	9,4 5.5	9.9 5.8	10.6 6.4 3.8
.3	.4	.4	.3	.4	.4	.5	.4	.4
4.7	4.6	3.9	4.1	4.2	3.6	4.1	4.2	4.1
	78.5 62.5; 5.8 4.9 2.3 2.3 5.3 21.5 100.0 74.8 58.9 6.2 4.2 1.8 2.0 3 5.5 25.2	78.5 77.4 62.5 61.5 5.8 56 4.9 5.0 2.3 2.6 2.3 2.2 3 5.3 5.2 21.5 22.6 100.0 100.0 74.8 73.8 58.9 58.3 6.2 5.8 4.2 4.1 1.8 2.0 2.0 2.0 3 .2 5.5 5.5 25.2 26.2 100.0 100.0 86.3 84.7 70.0 68.1 5.1 5.3 6.4 6.8 3.4 3.8 2.7 2.6 3.3 .4	78.5 77.4 76.6 62.5 61.5 5.9 4.9 5.0 5.5 2.3 2.6 2.9 2.3 2.2 2.4 3 .3 .3 5.3 5.2 4.0 21.5 22.6 23.4 100.0 100.0 100.0 74.8 73.8 72.6 58.9 58.3 57.9 6.2 5.8 6.2 4.2 4.1 4.5 1.8 2.0 2.2 2.0 2.0 2.1 3 .2 2 5.5 5.5 4.1 25.2 26.2 27.4 100.0 100.0 100.0 86.3 84.7 84.2 70.0 68.1 67.3 5.1 5.3 5.4 6.4 6.8 7.6 3.4 3.8 4.2 2.7 2.6 3.0 3.3 4 4.4	78.5 77.4 76.6 76.4 62.5 61.5 5.9 63.3 4.9 5.0 5.5 5.7 2.3 2.6 2.9 3.1 2.3 2.2 2.4 2.4 3.3 .3 .3 .3 5.3 5.2 4.0 4.5 21.5 22.6 23.4 23.6 100.0 100.0 100.0 100.0 74.8 73.8 72.6 72.5 58.9 58.3 57.9 56.5 6.2 5.8 6.2 6.6 4.2 4.1 4.5 4.7 1.8 2.0 2.2 2.3 2.0 2.0 2.1 2.1 3 2.1 2.2 2.3 2.0 2.0 2.1 2.1 3 2.1 2.2 2.3 2.5 5.5 5.5 4.1 4.7 25.2 26.2 27.4 27.5 100.0 100.0 100.0 100.0 86.3 84.7 84.2 83.7 70.0 68.1 67.3 66.4 5.1 5.3 5.4 5.6 6.4 6.8 7.6 7.6 3.4 3.8 4.2 4.5 2.7 2.6 3.0 2.8 3. 4 .4 3.3	100.0 100.0 100.0 100.0 100.0 100.0 78.5 77.4 76.6 76.4 75.3 662.5 61.5 65.9 6.3 6.0 4.9 5.0 5.5 5.7 6.0 2.3 2.6 2.9 3.1 3.1 2.3 3.3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3	100.0 100.0 100.0 100.0 100.0 100.0 100.0 78.5 77.4 76.6 76.4 75.3 75.7 62.5 61.5 61.1 59.9 58.9 58.9 5.8 5.6 5.9 6.3 6.0 6.5 5.9 5.7 6.0 6.5 2.3 2.6 2.9 3.1 3.1 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 78.5 77.4 76.6 76.4 75.3 75.7 75.9 62.5 61.5 61.1 59.9 58.9 58.9 58.1 5.8 5.6 5.9 6.3 6.0 6.3 6.4 4.9 5.0 5.5 5.7 6.0 6.5 7.0 2.3 2.6 2.9 3.1 3.1 3.3 3.8 2.3 2.2 2.4 2.4 2.6 2.9 2.9 2.9 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 78.5 77.4 76.6 76.4 75.3 75.7 75.9 76.8 62.5 61.5 61.1 59.9 58.9 58.9 58.1 58.4 5.8 5.6 5.9 6.3 6.0 6.3 6.4 6.7 7.4 2.3 2.6 2.9 3.1 3.1 3.3 3.8 4.0 2.3 2.2 2.4 2.4 2.6 2.9 2.9 3.1 3.1 3.3 3.8 4.0 2.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3

Racial/ethnic categories are at designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

NOTES: Details may not sum to totals due to rounding.

Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in science and engineering.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey





Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

Table 3. Percentage distribution of earned doctoral degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1989-97

						 -				
Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997	
				•	Total					
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
U.S. citizens and permanent residents, total 1	67.1	67.2	66.2	64.6	65.1	69.4	71.6	68.4	67.1	
White, non-Hispanics	57.5 4.5	57.6 4.4	55.5 4.9	54.0 5.5	54.0 6.3	53.0 11.4	52.4 13.8	51.4 11.4	50.5 9.3	
Underrepresented minorities, total	3.7	3.9	4.2	4.0	4.1	4.2	4.5	4.8	5.0 2.3	
Black non-Hispanics	1.7	1.6	1.9	1.7	1.8	1.9 2.1	2.1	2.1 2.3	2.3	
Hispanics	1.8	2.0	2.0 .2	2.1	2.1	.2	2.2	.4	.3	
American Indians or Alaskan Natives U.S. citizens and permanent	ا - ا		.2			·~	ļ	1		
residents, unknown race/ethnicity	1.4	1.3	1.7	1.1	.7	.8	.8	.9	2.4	
	1						20.4	20.7	25.6	
Nonresident aliens 2	24.8	28.7	31.8	32.8	31.9	28.7	26.4	28.7		
Citizenship unknown	8.0	4.1	1.9	2.6	3.0	1.9	2.1	2.9	7.2	
	Men									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
U.S. citizens and permanent residents, total 1	61.9	61.7	60.4	58.9	59.3	63.9	66.2	62.8	62.0	
	52.6	52.4	50.2	49.0	49.0	47.7	47.6	46.5	46.5	
White, non-Hispanics		4.6	4.7	5.3	6.1	11.9	14.0	11.3	9.0	
Underrepresented minorities, total	3.0	3.3	3.6		3.4	3.5	3.7	4.0	4.2	
Black, non-Hispanics	1.4	1.4	1.6		1.5	1.6	1.6	1.7	1.8	
Hispanics	. 1.5	1.8	1.8		1.8	1.7	1.9	1.9 .3	2.1 .2	
American Indians or Alaskan Natives	.2	.2	.2	.2	.1	.2	ا2.	.5	.2	
U.S. citizens and permanent residents, unknown race/ethnicity	1.5	1.4	1.8	1.3	.8	.8	.9	1.0	2.3	
Nonresident aliens ²	29.5	33.9	37.5	38.3	37.4	33.9	31.5	33.9	30.5	
Citizenship unknown	8.6	4.4	2.1	2.8	3.3	2.1	2.3	3.3	7.6	
				•	Women					
Total	. 100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
U.S. citizens and permanent residents,		81.4	80.7	78.8	78.7	82.0	83.4	80.5	77.8	
		74.0	60.4		GE E	65.1	63.0	61.9	58.5	
White, non-Hispanics	. 70.2 3.9	71.0 4.0	68.4 5.4			10.4		11.4		
AsiansUnderrepresented minorities, total		5.4	5.8				6.4			
Black, non-Hispanics	. 2.5	2.3	2,8	2.4	2.7	2.7				
Hispanics	. 2.5	2.8	2.7						3.0	
American Indians or Alaskan Natives	. .3	.3	j .3	.4	.2	.3	.3	.4	"	
U.S. citizens and permanent residents, unknown race/ethnicity	. 1.0	1.0	1.2	.8	.4	.6	.6	.8	2.6	
·	1	۱	17.7	19.1	19.0	16.7	15.0	17.3	15.7	
Nonresident aliens ²	. 12.8	15.4	''.'	13.1	1		1		I	

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

NOTES: Details may not sum to totals due to rounding.

See section C for specific fields included in science and engineering.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from NSF/SRS, Survey of Earned Doctorates



² Nonresident aliens include foreign citizens on temporary visas only.

Page 1 of 4 Field 1989 1990 1001 1992 1993 1994 1995 1996 Total Total, all Fields 1,030,171 1,062,151 1,107,997 1,150,072 1,179,278 1,183,141 1,174,436 1,179,815 1.186.589 Science and engineering 337,431 345.793 356 785 376.933 388 435 395.380 399,809 405,921 408,749 Engineering 66,947 64,703 62,186 61.898 62,670 62,962 63,330 62,306 63.066 270,484 281,090 294.599 Sciences 315.035 325.765 332,418 336 479 342.855 346,443 Natural sciencesPhysical science¹ 109,350 105,234 105,595 116.742 122 792 129,447 140,301 19,730 111.108 136 126 17,329 16.203 16,407 17,076 17,691 18,525 19,375 19,853 Mathematical science 15.314 14.674 14,784 14,851 14.870 14,431 13,201 12.869 Computer science 30,963 27,695 25.410 24.854 24,477 24,458 24,662 24,405 24.975 36.949 38 040 40,351 61,998 43,835 47,877 52,213 56,804 65,061 8,622 8.795 8.643 10,492 11,827 13,165 14,847 16,669 17,666 Social sciences 161,134 112,180 175,856 189,004 203,927 209,023 209,626 207,032 206,142 206.729 Social science 121 838 130 111 139 884 141,772 139,858 58,893 Psychology 48,954 54,018 64.043 67.251 69.768 72,601 73 828 74.734 Non-S&E² 692,740 716,358 751,212 773,139 790,843 787,761 774.627 773,894 777,840 U.S. citizens and permanent residents, total 3 Total, all Fields 1,003,714 1,035,598 1,078,340 1,121,525 1,146,907 1,148,914 1,137,424 1,142,028 1.147.815 Science and engineering 325,108 333,475 344 061 364.695 374.633 381,451 385,055 391,074 393,952 Engineering 61,875 59,786 57,604 57,675 58,165 58,422 58,520 58,304 57,509 263,233 273,689 286,457 Sciences 307.020 316 468 323 029 326 535 332,770 336,443 Natural sciences
Physical science¹ 104,928 100,908 101,039 106,739 135,390 111.656 117.843 124 297 131 065 15,608 14,150 16.724 15,799 16,469 16,927 18,652 19,167 19,059 Mathematical science 14.206 14,259 14.318 13 869 13,166 12,643 12.343 Computer science 28,828 23,373 22,880 22.273 22.367 22,976 22.185 22.225 36,076 Biological science 37,173 39.288 42.842 46,660 51,058 55,523 60.633 63,601 Agricultural science 8,348 8,529 8,373 10,289 11,478 12.919 14,589 16,397 17,411 158,305 172,781 185.418 Social sciences 200,281 204,812 205,186 202,238 201,705 201,053 109,862 Social science 119,288 127,216 136,902 127,368 73,685 138.391 136,273 130,579 128,893 Psychology 48,443 53,493 58,202 66,421 72,812 63,379 71,659 68.913 Non-S&E² 678,606 702,123 734 279 756.830 772.274 767.463 752,369 750.954 753.863 White, non-Hispanics 840,326 856,686 Total all Fields 892.363 921.453 931,603 918,124 892,785 884.128 877,759 Science and engineering 266,862 270,225 278,190 292,614 297,171 292,252 297 616 294.773 295.082 Engineering 50,081 47,494 45,162 45 026 44,853 44.687 43,726 43,098 41,624 216 781 222.731 Sciences 233,028 247,588 252,318 252,929 251,047 251,984 250,628 Natural sciences
Physical science¹ 84.578 80.210 80,111 13,145 84,133 13,678 87,401 91,196 94,575 14,952 98,707 15,088 100,871 14,238 13,055 13.941 14.616 14,920 11,649 Mathematical science 12,287 11,765 11,669 9,484 11.089 10.343 9.823 Computer science 21,711 18.918 17,349 16,844 15,626 15,816 15,470 Biological science ...,.... 28,404 28,814 30,264 32,506 35.080 40.628 43.680 45.325 37.942 Agricultural science 7,938 7,658 7,704 10,556 14,646 15,516 9,382 11.733 13,120 132,203 142,521 Social sciences 152,917 163,455 149.757 164.917 161.733 156,472 153 277 104,783 Social science 91.697 98,385 111,389 100.558 111.154 106.863 97.372 94.411 Psychology 40 506 44,136 48.134 52,066 53,763 54,870 55,914 55,905 55,346 573.464 586,461 614,173 628,839 585,507 634 432 620 508 598 012 589 046

See explanatory information and SOURCE at end of table.



Page 2 of 4 1997 1994 1995 1996 1989 1990 1991 1992 1993 Field Asians 59,295 63,117 67,358 38.027 41,725 46,616 50,587 54,675 37,573 Total, all Fields 31,031 33,139 26,420 29,128 22,635 24,504 19,138 19,437 20,552 Science and engineering 7,085 6,785 6.799 6.220 6,265 6,407 6,516 6.012 6.075 Engineering 26 054 19,904 24.232 18.097 14,332 13,063 13,425 16.370 Sciences 14 200 13,212 12,007 10,401 7,260 7,326 7.595 8.496 9.524 Natural sciences 1,620 1.347 983 1,001 1,098 1,096 922 965 935 877 926 915 857 915 Mathematical science 1.019 2,365 2,448 2.767 2.245 2,247 2,144 2.010 2.082 Computer science 8,535 7,958 5.959 7,043 4,402 5,103 2.907 3,245 3,559 Biological science 401 312 287 128 154 163 Agricultural science 11,854 11,020 10,336 5.803 6.099 6,737 7,874 8,573 9.503 Social sciences 7,354 7 787 7,005 4,228 4,852 5,724 2,150 6 035 6.726 Social science 4.067 2,777 3,331 3 666 1,575 1,630 1,885 2.538 Psychology 30.167 32,086 34,219 23,981 26,083 28.255 18,590 21,173 18 435 Non-S&F2 Underrepresented minorities, total 174,243 167.382 158 432 151,063 107,377 118 522 129,448 140,086 102,165 Total, all Fields 58.129 51.844 55,114 48.822 44 682 31,950 33,419 36,682 41.383 Science and engineering 6,974 7,463 6.717 5,714 6.020 4.729 4,953 5.277 4 805 Engineering 50,666 36,106 38,968 42,802 45,127 48.140 28,690 31 729 27,145 16,135 16.856 13,782 14,815 10,530 1,245 11,722 12,510 10,830 10.960 Natural sciences

Physical science 1 2,076 2,063 1,737 1,355 1,425 1.528 1.708 1,589 1.619 1,490 Mathematical science 1,178 1.334 1.432 3,734 3.784 3,611 3,915 3.292 3.342 3,390 3,742 3.416 Computer science 7.648 8.255 6,606 5,602 6,127 5,043 Biological scienceAgricultural science 4,151 4,243 4,551 1,096 1,008 500 773 480 397 448 428 32,005 33.810 26,458 29.020 30,312 18,160 20,769 24,384 16,315 Social sciences 19,400 20,471 21.385 12,394 14,100 16,647 17.918 Social science 12,425 11.534 8,540 10,691 7.737 5,103 5,766 6.669 Psychology 112,268 116,114 102.241 106,588 73,958 81,840 88.065 95.404 70,215 Non-S&E² Black, non-Hispanics 92.067 85,287 89,554 82,316 59,301 65,009 71,311 76,667 56,837 Total, all Fields 29,055 30,444 19 987 22,431 24,421 26,289 27,528 18,230 17,385 Science and engineering 3.076 3,000 2,659 2,845 2,067 2,072 2,229 2.362 2.577 Engineering 26,055 27,368 24 683 21,844 23,630 17,758 20,069 15.318 16,158 Sciences . 8,670 9,061 6,401 6,972 836 7,559 921 8.021 5,782 5,834 753 Natural sciencesPhysical science¹ 6.005 1,110 1,034 1,100 697 650 816 1,071 995 981 Mathematical science 965 792 720 811 904 2,370 2,415 2.498 2,247 1,997 2,090 2,213 2.398 2.457 Computer science 4,123 2,980 3.811 3,231 2.739 1,916 1,994 2,111 2,385 363 268 263 162 206 219 171 143 18,307 17.385 16,662 16,071 14.872 9,313 10,376 11.924 13.668 11,660 Social sciences 11,357 10,835 10.921 10,254 6.570 7,226 8.236 9.489 Social science 6,028 6.647 5,741 3,150 3,688 4,179 4,618 5,236 2,743 Psychology 61,623 60,499 57,759 41,071 45.022 52,246 56,027 48.880 39,452 Non-S&E²

See explanatory information and SOURCE at end of table.



-		-							age 3 of 4		
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997		
					Hispanics			•			
Total, all Fields	41,361	43,864	49,027	53.007	57.845	62.683	66.691	71,015	74,938		
Science and engineering	13.327	13,918	15,351	17,391	18,442	20.529	22,190	23.791	25.266		
Engineering	2,561	2.511	2.566	2,733	2,961	3,143	3.651	3,731	4,125		
Sciences Natural sciences Physical science Mathematical science Computer science	10,766 4,417 563 373 1,195	11.407 4,357 522 413 1,085	12,785 4,705 533 480 1,215	14,658 4.892 546 482 1,173	15.481 5,034 599 470 1,096	17.386 5.648 733 543 1,135	18,539 6,119 800 536 1,307	20,060 6,764 872 585 1,280	21,141 7,055 853 581 1.267		
Biological scienceAgricultural science	2,090 196	2.119 218	2,264 213	2,477 214	2,652 217	2.901 336	3.090 386	3,521 506	3,793 561		
Social sciences	6.349 4,197 2.152	7,050 4,645 2,405	8,080 5,334 2,746	9.766 6.519 3.247	10,447 6,860 3,587	11,738 7,748 3,990	12.420 7.877 4,543	13,296 8.260 5.036	14,086 8,804 5,282		
Non-S&E ²	28,034	29,946	33.676	35,616	39,403	42,154	44,501	47,224	49,672		
	American Indians or Alaskan Natives										
Total. all Fields	3,967	4.212	4.486	5.130	5,574	6,064	6,454	6,813	7.238		
Science and engineering	1,238	1,271	1.344	1,561	1,819	2.004	2,126	2,268	2,419		
Engineering	177	146	158	182	176	218	221	243	26:		
Sciences Natural sciences Physical science 1 Mathematical science Computer science	1,061 408 62 53 90	1,125 391 73 45 84	1,186 421 69 43 80	1,379 429 63 46 79	1,643 504 93 55 81	1,786 575 83: 59 78	1,905 675 98 58 110	2,025 701 104 53 89	2.157 740 100 56 97		
Biological science	145 58	130 59	176 53	181 60	211 64	246 109	285 124	316 139	339 148		
Social sciences Social science Psychology	653 445 208	734 523 211	765 530 235	950 639 311	1,139 804 335	1,211 817 394	1,230 823 407	1,324 854 470	1,417 921 496		
Non-S&E ²	2,729	2,941	3,142	3,569	3,755	4,060	4.328	4,545	4.81		
		U	.S. citizens a	and perman	ent residents	s, unknown r	race/ethnicit	у			
Total, all Fields	23,650	33,508	25,730	24,008	24,631	25,052	26,912	27,401	28,455		
Science and engineering	7,158	10,394	8,637	8,063	8,276	8.593	9.310	9,847	10,43		
Engineering	914	1,551	1,269	1,107	1,191	1,199	1,292	1,433	1,33		
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	6,244 2,260 242 247 1,107	8,843 2,842 371 333 1,151	7,368 2,373 316 308 722	6,956 2,388 365 247 612	7,085 2,221 360 244 483	7,394 2,464 363 260 511	8,018 2,900 421 269 555	8,414 3,011 444 266 523	9,095 3,460 456 274 849		
Biological science	614 50	871 116	914 113	891 273	/875 259	1,030 300	1.246 409	1,347 431	1,480 39		
Social sciences	3,984 2,725 1,259	6,001 4,040 1,961	4.995 3.481 1,514	4,568 3,142 1,426	4,864 3,284 1,580	4,930 3.284 1,646	5.118 3.395 1.723	5.403 3,696 1,707	5.632 3,785 1.847		
Non-S&E 2	16,492	23.114	17.093	15.945	16,355	16,459	17.602		18.023		

See explanatory information and SOURCE at end of table.



18 20

								P	age 4 of 4			
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997			
	Nonresident aliens 4											
Total, all Fields	26,457	26,553	29,657	28,547	32,371	34,227	37,012	37,787	38,774			
Science and engineering	12,323	12,318	12,724	12,238	13,802	13,929	14,754	14,847	14,797			
Engineering	5,072	4,917	4,582	4,223	4,505	4,540	4,810	4,762	4,797			
Sciences Natural sciences Physical science Mathematical science Computer science	7,251 4,422 605 543 2,135	7,401 4,326 595 524 2,066	8,142 4,556 608 578 2,037	8,015 4,369 607 592 1,974	9,297 5,086 764 552 2,204	9,389 4,949 713 562 2,273	9,944 5,150 723 593 2,295	10,085 5,061 686 558 2,180	10,000 4,911 671 526 1,999			
Biological science	873 266	867 274	1,063 270	993 203	1,217 349	1,155 246	1,281 258	1,365 272	1,460 255			
Social sciences Social science Psychology	2,829 2,318 511	3,075 2,550 525		3,646 2,982 664	4,211 3,381 830	4,440 3.585 855	4,794 3.852 942	5,024 4.008 1,016	5,089 4.040 1,049			
Non-S&E ²	14,134	14,235	16,933	16,309	18,569	20.298	22,258	22,940	23,977			

¹ In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES:

Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in each category.

SOURCE:

Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey

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19 21

Non-S&E refers to non-science and non-engineering.

³ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

⁴ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

								P	age 1 of 4		
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997		
					Total		•				
Total, all Fields	487,566	495.867	508.952	525.395	537,536	537 061	531,146	528.000	525.282		
Science and engineering	198.728	199,916	201,499	209,270	214,388	216,492	216,078	216.614	214,329		
Engineering	56,759	54.730	52,522	52.270	52.696	52.569	52.389	51,765	50.846		
Sciences Natural sciences Physical science Mathematical science Computer science	141,969 65,875 12,157 8,264 21,418	145,186 62,518 11,109 7,863 19,321	148,977 62,091 11,199 7,804 17,896	157.000 64,678 11,466 7,923 17,670	161,692 67,855 11,877 7,859 17,565	163,923 70,956 12,253 7,754 17,466	163,689 73,593 12,559 7,318 17,628	164,849 76,775 12,666 7,176 17,666	163.483 77,585 12,306 6,938 18,166		
Biological science	18,295 5,741	18.631 5,594	19.715 5.477	21,107 6,512	23,111 7,443	25,314 8,169	26,956 9,132	29.189 10,078	29.839 10,336		
Social sciences Social science Psychology	76,094 61,803 14,291	82,668 67,269 15,399	86,886 70,731 16,155	92.322 75,185 17,137	93.837 75,808 18,029	92,967 74,218 18,749	90,096 70,458 19,638	88,074 68,109 19,965	85,898 66,407 19,491		
Non-S&E ²	288,838	295.951	307,453	316,125	323.148	320.569	315,068	311,386	310,953		
	U.S. citizens and permanent residents, total ³										
Total, all Fields	470,449	478,959	490,725	508,289	518,484	517,318	510,030	506,569	503,659		
Science and engineering	189,685	190,980	192.516	200,929	204,994	207.030	206.144	206,828	204.767		
Engineering	52,160	50,303	48,410	48,518	48,655	48.577	48,145	47,623	46,725		
Sciences Natural sciences Physical science Mathematical science Computer science	137,525 62,973 11,751 7,917 19,901	140,677 59,662 10,694 7,539 17,849	144,106 59,096 10,788 7,430 16,433	152,411 61,872 11,049 7,565 16,251	156,339 64,584 11,352 7,514 15,964	158,453 67,726 11,786 7,390 15,799	157,999 70,302 12,086 6,960 15,960	159,205 73,606 12,229 6,790 16,093	158,042 74,571 11,875 6,618 16,735		
Biological scienceAgricultural science	17,869 5,535	18,200 5,380	19,171 5,274	20,628 6,379	22,542 7,212	24,739 8.012	26,334 8,962	28,576 9,918	29,170 10,173		
Social sciences	74,552 60,431 14,121	81,015 65,776 15,239	85.010 69.033 15.977	90,539 73,577 16,962	91,755 73,946 17,809	90,727 72,185 18,542	87,697 68,291 19,406	85,599 65,909 19,690	83,471 64,235 19,236		
Non-S&E ²	280,764	287.979	298,209	307,360	313,490	310,288	303,886	299,741	298,892		
				White	e, non-Hispa	anics					
- Total, all Fields	398,552	401.024	410,745	422,517	427,240	420,211	407,155	399,132	392,541		
Science and engineering	158,590	157,675	158,687	164,220	166,063	165,245	161,731	159,889	156,121		
Engineering	42,779	40,533	38,692	38,513	38,244	37.830	36,785	35,977	34,579		
Sciences Natural sciences Physical science Mathematical science Computer science	115,811 52,132 10,173 6,598 15,799	117,142 48.848 9,179 6.253 13,974	119,995 48.304 9.203 6,119 12.916	125,707 50,126 9,430 6,255 12,571	127,819 52,048 9.614 6,131 12,329	127,415 54,115 9,958 5,920 12,022	124,946 55,197 10,006 5,456 11,793	123,912 57,162 9,966 5,239 11,924	121,542 57,464 9,695 5,085 12,070		
Biological science	14,377 5,185	14,488 4,954	15,174 4,892	16.030 5.840	17,293 6,681	18,882 7,333	19,790 8,152	21,065 8,968	21.388 9,226		
Social sciences	63,679 51,766 11,913	68,294 55,662 12,632	71,691 58,414 13,277	75,581 61,574 14,007	75,771 61,269 14,502	73,300 58,409 14,891	69,749 54,508 15,241	66,750 51,580 15,170	64,078 49.558 14.520		
Non-S&E ²	239,962	243,349	252,058	258,297	261,177	254,966	245,424	239,243	236,420		

See explanatory information and SOURCE at end of table.



								Pa	ge 2 of 4		
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997		
					Asians		_				
Total, all Fields	19,203	19.097	20,773	23,190	24,819	26,420	28,348	29,954	31,732		
Science and engineering	11,578	11,528	11,942	13,198	14,132	14,967	16,039	17,015	17,914		
Engineering	4,936	4,827	4.969	5,067	5,130	5,235	5,340	5,363	5.611		
Sciences Natural sciences Physical science Mathematical science Computer science	6,642 4,073 626 527 1,420	6,701 4,054 592 491 1,335	6,973 4,149 606 482 1,268	8,131 4,783 615 486 1,373	9,002 5,380 675 502 1,492	9,732 5,721 648 523 1,476	10,699 6,483 784 519 1,583	11,652 7,161 908 539 1.697	12,303 7,481 881 494 1,930		
Biological science	1,442 58	1.573 63	1,736 57	2,230 79	2,633 78	2,992 82	3,467 130	3,878 139	4,007 169		
Social sciences	2,569 2,065 504	2.647 2.156 491	2,824 2,260 564	3,348 2,728 620	3,622 2,884 738	4.011 3,204 807	4,216 3,247 969	4,491 3,366 1,125	4,822 3,617 1.205		
Non-S&E ²	7,625	7,569	8.831	9.992	10,687	11,453	12,309	12,939	13.818		
	Underrepresented minorities, total										
Total, all Fields	41,650	43,047	46,914	50,695	54,600	58,528	61,542	64,369	66,191		
Science and engineering	15,672	15,954	17.027	18,890	20,160	22,001	23.235	24.400	25,112		
Engineering	3,638	3,574	3,654	3,952	4,261	4,458	4,917	5,056	5,410		
Sciences Natural sciences Physical science 1 Mathematical science Computer science	12,034 5,411 771 636 2,013	12,380 5,043 655 614 .1,797	13,373 5,226 755 657 1,758	14,938 5,450 745 675 1,864	15,899 5,766 792 744 1,802	17,543 6,389 931 786 1,939	18,318 6,888 998 820 2,190	19,344 7,478 1,044 852 2,092	19,702 7,610 991 878 2,122		
Biological science	1,734 257	1,685 292	1,799 257	1,885 281	2,130 298	2,337 396	2,449 431	2,939 551	3,058 561		
Social sciences Social science Psychology	6,623 5,286 1,337	7,337 5,788 1,549	8,147 6,442 1,705	9,488 7,590 1,898	10,133 8,013 2,120	11,154 8,813 2,341	11,430 8,742 2,688	11,866 8,990 2,876	12,092 9,092 3,000		
Non-S&E ²	25,978	27,093	29,887	31,805	34,440	36,527	38,307	39,969	41,079		
				Blac	k, non-Hispa	anics					
Total, all Fields	21,913	22.590	24,238	26,518	28,374	30,106	30,998	32,223	32,726		
Science and engineering	7,685	7,830	8,448	9,375	10,099	10,806	11,127	11,700	11,947		
Engineering	1,397	1,416	1,484	1,614	1,764	1,784	1,846	1,964	2,019		
Sciences Natural sciences Physical science 1 Mathematical science Computer science	6,288 2,732 365 374 1,205	6,414 2,476 292 342 1,074	6,964 2.538 391 380 971	7,761 2,709 381 374 1,092	370 444		9,281 3,314 495 476 1,241	9,736 3,591 482 468 1,218	9,928 3,678 466 510 1,212		
Biological science	700 88	658 110	696 100	749 113			981 121	1,236 187	1,30 ⁴ 186		
Social sciences Social science Psychology	3,556 2,911 645	3,938 3,144 794	3,547	5,052 4,070 982	4,364	4,644	5,967 4,565 1,402	6,145 4,727 1,418			
Non-S&E ²	14,228	14,760	15,790	17,143	18,275	19.300	19,871	20,523	20,779		

See explanatory information and SOURCE at end of table.

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								P	age 3 of 4		
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997		
		•			Hispanics		1	•			
Total, all Fields	18,002	18,683	20,781	22,026	23,825	25,860	27,875	29,335	30.550		
Science and engineering	7,318	7,434	7,888	8,730	9,160	10,190	11,031	11,592	12,044		
Engineering	2,100	2,035	2,039	2,187	2,355	2,495	2,895	2,897	3,196		
Sciences Natural sciences Physical science Mathematical science Computer science	5,218 2,432 362 224 750	5,399 2,328 311 249 669	5,849 2,458 318 259 738	6,543 2,497 326 279 724	6,805 2,608 361 273 700	7,695 2,925 415 300 719	8,136 3,196 437 315 876	8,695 3,509 488 354 824	8,848 3,544 468 340 841		
Biological science Agricultural science	965 131	955 144	1,019 124	1,043 125	1,144 130	1,298 193	1,340 228	1,560 283	1,598 297		
Social sciences Social science Psychology	2,786 2,153 633	3,071 2,384 687	3,391 2,634 757	4,046 3,220 826	4,197 3,269 928	4,770 3,774 996	4,940 3,774 1,166	5,186 3,860 1,326	5,304 4,019 1,285		
Non-S&E ²	10,684	11,249	12,893	13,296	14,665	15,670	16,844	17,743	18,506		
-	American Indians or Alaskan Natives										
Total, all Fields	1,735	1,774	1,895	2,151	2,401	2,562	2,669	2,811	2,915		
Science and engineering	669	690	691	785	901	1,005	1,077	1,108	1,121		
Engineering	141	123	131	151	142	179	176	195	195		
Sciences Natural sciences Physical science Mathematical science Computer science	528 247 44 38 58	567 239 52 23 54	560 230 46 18 49	634 244 38 22 48	759 286 61 27 53	826 318 52 29 59	901 378 66 29 73	913 378 74 30 50	926 388 57 28 69		
Biological science Agricultural science	69 38	72 38	84 33	93 43	103 42	112 66	128 82	143 81	156 78		
Social sciences	281 222 59	328 260 68	330 261 69	390 300 90	473 380 93	508 395 113	523 403 120	535 403 132	538 414 124		
Non-S&E ²	1,066	1,084	1,204	1,366	1,500	1,557	1,592	1,703	1,794		
	-	U	.S. citizens	and perman	ent resident	s, unknown	race/ethnicit	у			
Total, all Fields	11,044	15,791	12,293	11,887	11,825	12,159	12,985	13,114	13,195		
Science and engineering	3,845	5,823	4,860	4,621	4,639	4,817	5,139	5,524	5,620		
Engineering	807	1,369	1,095	986	1,020	1,054	1,103	1,227	1,125		
Sciences Natural sciences Physical science 1 Mathematical science Computer science	3,038 1,357 181 156 669	4,454 1,717 268 181 743	3,765 1,417 224 172 491	3,635 1,513 259 149 443	3,619 1,390 271 137 341	3,763 1,501 249 161 362	4,036 1,734 298 165 394	4,297 1,805 311 160 380	4,495 2,016 308 161 613		
Biological science	316 35	454 71	462 68	483 179	486 155	528 201	628 249	694 260	717 217		
Social sciences Social science Psychology	1,681 1,314 367	2,737 2,170 567	2,348 1,917 431	2,122 1,685 437	2,229 1,780 449	2,262 1,759 503	2,302 1,794 508	2,492 1,973 519	2,479 1.968 511		
Non-S&E ²	7,199	9,968	7,433	7,266	7,186	7,342	7.846	7,590	7,575		

See explanatory information and SOURCE at end of table.



•								P	age 4 of 4			
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997			
	Nonresident aliens ⁴											
Total, all Fields	17,117	16,908	18,227	17,106	19,052	19,743	21,116	21,431	21,623			
Science and engineering	9,043	8,936	8,983	8,341	9,394	9,462	9,934	9,786	9,562			
Engineering	4,599	4,427	4,112	3,752	4,041	3,992	4,244	4,142	4,121			
Sciences Natural sciences Physical science Mathematical science Computer science	4,444 2,902 406 347 1,517	4,509 2,856 415 324 1,472	4,871 2,995 411 374 1,463	4,589 2,806 417 358 1,419	5,353 3,271 525 345 1,601	5,470 3,230 467 364 1,667	5,690 3,291 473 358 1,668	5,644 3,169 437 386 1,573	5,441 3,014 431 320 1,431			
Biological scienceAgricultural science	426 206	431 214	544 203	479 133	569 231	575 157	622 170	613 160	669 163			
Social sciences Social science Psychology	1,542 1,372 170	1,653 1,493 160	1,876 1,698 178	1,783 1,608 175	2,082 1,862 220	2,240 2,033 207	2,399 2,167 232	2,475 2,200 275	2,427 2,172 255			
Non-S&E ²	8,074	7,972	9,244	8,765	9.658	10,281	11,182	11,645	12,061			

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF. NOTES:

See section C for specific fields included in each category.

Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey SOURCE:



Non-S&E refers to non-science and non-engineering.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

Page 1 of 4 Fleid 1989 1990 1991 1992 1993 1994 1995 1996 1997 Total 661,307 542.605 566,284 599,045 624,677 641,742 646,080 643,290 651,815 Total, all Fields 145 877 174.047 178,888 183,731 189,307 194,420 138.703 155 286 167 663 Science and engineering 9,974 10,393 10,941 11,301 11,460 10,188 9,973 9,664 9,628 Engineering 128.515 135.904 145.622 158,035 164,073 168,495 172,790 178,006 182,960 Sciences 43,504 46,430 48,887 51,836 55,854 59,351 62,716 Natural sciencesPhysical science 1 43.475 42.716 5,094 5,208 5,610 5,814 6,272 6,816 7 187 7,424 5.931 Mathematical science 7 050 6811 6.980 6,928 7.011 6 6 7 7 6.441 6.025 7,514 7,034 6.809 Computer science 9.545 8.374 7.184 6.912 6.992 24.766 32.809 35,222 22,728 29.848 18.654 19 409 20.636 26.899 Biological science 6,591 7,330 3.028 4.384 4.996 5.715 Agricultural science 3.054 3.166 120 244 85,040 93,188 102,118 111.605 115,186 116,659 116.936 118 655 65.001 63.973 64.792 Social science 50.377 54.569 59 380 64 699 65.964 65.640 34,663 38,619 51,019 55.243 42,738 46,906 49,222 52,963 53.863 Psychology 420.407 443.759 467.192 459.559 462 508 466 887 Non-S&E² 403,902 457.014 467,695 U.S. citizens and permanent residents, total 3 533,265 556,639 587,615 613,236 628,423 631,596 627,394 635,459 644,156 Total, all Fields 135.423 142.495 151.545 163.766 169 639 174.421 178,911 184,246 189,185 Science and engineering 10.681 10.784 Engineering 9,715 9,483 9.194 9.157 9.510 9.845 10.375 125,708 173,565 178.401 133,012 142,351 154.609 160,129 164,576 168.536 Sciences 57,459 6,938 Natural sciencesPhysical science¹ 41,955 41,246 41,943 44,867 47,072 50,117 53,995 60,819 7,184 5,725 4 973 4 914 5.011 5.420 5 575 6 026 6 566 Mathematical science 6,854 6,611 6,776 6,694 6,479 6,206 6.804 8,927 6,386 6,132 6.241 Computer science 6,940 6,629 6,407 34,431 18,207 18,973 20,117 29,189 32,057 22.214 24.118 26.319 3,910 4,907 7,238 2,994 2,968 3,099 4.266 5,627 6,479 116,106 117,582 83 753 91.766 114,459 100.408 109.742 113.057 114.541 63,325 64,088 62,288 62,984 Social science 49,431 53.512 58.183 64.445 34,322 38,254 42,225 46,417 48,612 50,371 52,253 53,122 54,449 Psychology 397,842 454,971 Non-S&E² 414.144 436.070 449 470 457 175 448.483 451.213 458.784 White, non-Hispanics 485,218 441.774 455.662 481,618 498.936 504.363 497.913 485,630 484.996 Total, all Fields 108,272 112.550 119,503 128,394 131,108 132,371 133,042 135,193 136,131 Science and engineering 7,045 7,302 6,961 6.470 6.513 6.609 6.857 6,941 7,121 Engineering 105.589 128.072 129 086 100.970 113.033 121,881 124,499 125,514 126,101 Sciences Natural sciencesPhysical science¹ 43,407 31,362 32,446 31.807 34,007 35,353 4,327 37.081 39.378 41.545 4,065 3,876 4 946 5,225 3,942 4,248 4.658 5,122 Mathematical science 5,530 4,887 4,584 4,399 5,689 5,468 5,538 5,169 3.556 5.912 4.944 4,433 4,273 3,826 3,794 3,739 3.546 Computer science 22,615 23,937 Biological science 14,027 14,326 15,090 16,476 17,787 19,060 20,838 Agricultural science 2,753 2,704 3,875 4,400 5,678 6,290 2,812 3,542 85,679 68.524 74,227 81,226 87,874 89,146 88,433 86,723 86.527 Social sciences 42,723 46,369 49,885 48,454 46,050 45,792 44.853 Social science 40.735 40.826 Psychology 28,593 31,504 34.857 38,059 39 261 39,979 40,673 362,115 349.087 333,502 343,112 352,588 349,803 370,542 373.255 365,542 Non-S&E²

See explanatory information and SOURCE at end of table.





24

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Field	1989	1990	1991	1992	1993	1994	1995	1996	1997		
				•	Asians		•	•			
Total, all Fields	18,370	18,930	20,952	23,426	25,768	28,255	30,947	33,163	35,626		
Science and engineering	7,560	7,909	8,610	9,437	10,372	11,453	13,089	14,016	15,225		
Engineering	1,139	1,185	1,251	1,198	1,277	1,281	1,445	1,436	1,474		
Sciences Natural sciences Physical science Mathematical science Computer science	6,421 3,187 296 492 848	6,724 3,272 345 383 809	7,359 3,446 377 433 742	8,239 3,713 386 371 709	9,095 4,144 423 413 753	10,172 4,680 448 403 771	11,644 5,524 563 446 782	12,580 6,051 651 396 751	13,751 6,719 739 383 837		
Biological science	1,465 86	1,672 63	1,823 71	2,172 75	2,470 85	2,967 91	3,576 157	4,080 173	4,528 232		
Social sciences	3,234 2,163 1,071	3,452 2,313 1,139	3,913 2,592 1,321	4,526 2,996 1,530	4,951 3,151 1,800	5,492 3,522 1,970	6,120 3,758 2,362	6,529 3,988 2,541	7.032 4.170 2,862		
Non-S&E ²	10,810	11,021	12,342	13,989	15,396	16,802	17,858	19,147	20,401		
	Underrepresented minorities, total										
Total, all Fields	60,515	64,330	71,608	78,753	85,486	92,535	96,890	103,013	108,052		
Science and engineering	16,278	17,465	19,655	22,493	24,522	26,821	28,609	30,714	33,017		
Engineering	1,167	1,155	1,299	1,325	1,453	1,562	1;800	1,918	2,053		
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	15,111 5,419 551 582 1,729	16,310 5,487 590 564 1,619	18,356 5,734 600 677 1,534	21,168 6,272 680 757 1,478	23,069 6,744 736 746 1,588	25,259 7,393 806 808 1,672	26,809 7,927 934 769 1,725	28,796 8,657 1,032 767 1,692	30,964 9,246 1,072 830 1,612		
Biological scienceAgricultural science	2,417 140	2,558 156	2,752 171	3,158 199	3,472 202	3,790 317	4,157 342	4,709 457	5,197 535		
Social sciences Social science Psychology	9,692 5,926 3,766	10,823 6,606 4,217	12,622 7,658 4,964	14,896 9,057 5,839	16,325 9,905 6,420	17,866 10,587 7,279	18,882 10,879 8,003	20,139 11,481 8,658	21,718 12,293 9,425		
Non-S&E ²	44,237	46,865	51,953	56,260	60,964	65,714	68,281	72,299	75,035		
				Blac	k, non-Hispa	ınics					
Total, all Fields	34,924	36,711	40,771	44,793	48,293	52,210	54,289	57,331	59,341		
Science and engineering	9,700	10,400	11,539	13,056	14,322	15,483	16,401	17,355	18,497		
Engineering	670	656	745	748	813	875	999	1,036	1,057		
Sciences Natural sciences Physical science Mathematical science Computer science	9,030 3,273 332 418 1,252	9,744 3,306 358 378 1,173	10,794 3.296 362 431 1,026	12,308 3,692 435 530 998	521	14,608 4,413 457 535 1,237	15,402 4,707 539 519 1,257	16,319 5,079 618 513 1,197	17,440 5,383 644 561 1,158		
Biological scienceAgricultural science	1,216 55	1,336 61	1,415 62	1,636 93		2,053 131	2,250 142	2,575 176	2,819 201		
Social sciences	5,757 3,659 2,098	6,438 4,082 2,356	7,498 4,689 2,809	8,616 5,419 3,197	5,890	10,195 6,191 4,004	10,695 6,356 4,339	11,240 6,630 4,610	12,057 7,001 5,056		
Non-S&E ²	25,224	26,311	29,232	31,737	33,971	36,727	37,888	39,976	40,844		

See explanatory information and SOURCE at end of table.

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Agricultural science 20 21 20 17 22 43 42 58 70 Social sciences 372 406 435 560 666 703 707 789 879 Social science 223 263 269 339 424 422 420 451 507 Psychology 149 143 166 221 242 281 287 338 372 Non-S&E 2 1,663 1,857 1,938 2,203 2,255 2,503 2,736 2,842 3,025 U.S. cilizens and permanent residents, unknown race/ethnicity Total, all Fields 12,606 17,717 13,437 12,121 12,806 12,893 13,927 14,287 15,260 Science and engineering 3,313 4,571 3,777 3,442 3,637 3,776 4,171 4,323 4,812 Engineering 107 182 174 121 171 145 189 206 212 Sciences 3,206 4,389 3,603 3,321 3,466 3,631 3,982 4,117 4,600 Natural sciences 903 1,125 956 875 831 963 1,166 1,206 1,447 Physical science 91 152 136 98 107 99 104 106 113 Computer science 438 408 231 169 142 149 161 143 236 Biological science 298 417 452 408 389 502 618 653 766 Agricultural sciences 2,303 3,264 2,647 2,446 2,635 2,668 2,816 2,911 3,155 Social sciences 2,303 3,264 2,647 2,446 2,635 2,668 2,816 2,911 1,723 1,816 Social science 1,411 1,870 1,554 1,457 1,504 1,525 1,601 1,723 1,817 Psychology 892 1,394 1,083 989 1,131 1,143 1,215 1,188 1,336									Pa	ige 3 of 4
Total, all Fields	Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
Science and engineering						Hispanics	_			
Engineering	Total, all Fields	23,359	25,181	28,246	30,981	34,020	36,823	38,816	41,680	44,388
Sciences	Science and engineering	6,009	6,484	7,463	8,661	9,282	10,339	11,159	12,199	13,222
Natural sciences	Engineering	461	476	527	546	606	648	756	834	929
Agricultural science	Natural sciences Physical science 1	1,985 201 149	2,029 211 164	2,247 215 221	2,395 220 203	2,426 238 197	2,723 318 243	2,923 363 221	3,255 384 231	3,511 385 241
Social science 2,044 2,261 2,700 3,299 3,591 3,994 4,103 4,400 4,785 Psychology 1,519 1,718 1,989 2,421 2,659 2,994 3,377 3,710 3,991 Non-S&E2 17,350 18,697 20,783 22,320 24,738 26,484 27,657 29,481 31,166	Biological science									
Total, all Fields	Social science	2,044	2,261	2,700	3,299	3,591	3,974	4,103	4,400	4,785
Total, all Fields	Non-S&E ²	17,350	18,697	20,783	22.320	24,738	26,484	27,657	29,481	31,166
Science and engineering		American Indians or Alaskan Natives								
Engineering 36 23 27 31 34 39 45 48 67	Total, all Fields	2,232	2.438	2,591	2,979	3,173	3,502	3,785	4,002	4,323
Sciences 533 558 626 745 884 960 1,004 1,112 1,231	Science and engineering	569	581	653	776	918	999	1.049	1.160	1,298
Natural sciences	Engineering	36	23	27	31	34	39	45	48	·67
Agricultural science 20 21 20 17 22 43 42 58 70 Social sciences 372 406 435 560 666 703 707 789 879 Social science 223 263 269 339 424 422 420 451 507 Psychology 149 143 166 221 242 281 287 338 372 Non-S&E 2 1,663 1,857 1,938 2,203 2,255 2,503 2,736 2,842 3,025 U.S. cilizens and permanent residents, unknown race/ethnicity Total, all Fields 12,606 17,717 13,437 12,121 12,806 12,893 13,927 14,287 15,260 Science and engineering 3,313 4,571 3,777 3,442 3,637 3,776 4,171 4,323 4,812 Engineering 107 182 174 121 171 145 189 206 212 Sciences 3,206 4,389 3,603 3,321 3,466 3,631 3,982 4,117 4,600 Natural sciences 903 1,125 956 875 831 963 1,166 1,206 1,447 Physical science 91 152 136 98 107 99 104 106 1,447 Mathematical science 91 152 136 98 107 99 104 106 113 Computer science 438 408 231 169 142 149 161 143 236 Biological science 298 417 452 408 389 502 618 653 766 Agricultural sciences 2,303 3,264 2,647 2,446 2,635 2,668 2,816 2,911 3,155 Social sciences 2,303 3,264 2,647 2,446 2,635 2,668 2,816 2,911 1,723 1,817 Psychology 892 1,394 1,083 989 1,131 1,143 1,215 1,188 1,336	Natural sciences Physical science 1 Mathematical science	161 18 15	152 21 22	191 23 25	185 25 24	218 32 28	257 31 30	297 32 29	323 30 23	352 43 28
Social science 223 263 269 339 424 422 420 451 507										183 70
U.S. citizens and permanent residents, unknown race/ethnicity	Social science	223	263	269	339	424	422	420	451	879 507 372
Total, all Fields 12,606 17,717 13,437 12,121 12,806 12,893 13,927 14,287 15,260 Science and engineering 3,313 4,571 3,777 3,442 3,637 3,776 4,171 4,323 4,812 Engineering 107 182 174 121 171 145 189 206 212 Sciences 3,206 4,389 3,603 3,321 3,466 3,631 3,982 4,117 4,600 Natural sciences 903 1,125 956 875 831 963 1,166 1,206 1,447 Physical science¹ 61 103 92 106 89 114 123 133 148 Mathematical science 91 152 136 98 107 99 104 106 115 Computer science 438 408 231 169 142 149 161 143 236 Biological science <td>Non-S&E²</td> <td>1,663</td> <td>1,857</td> <td>1,938</td> <td>2,203</td> <td>2,255</td> <td>2,503</td> <td>2,736</td> <td>2,842</td> <td>3,025</td>	Non-S&E ²	1,663	1,857	1,938	2,203	2,255	2,503	2,736	2,842	3,025
Science and engineering 3,313 4,571 3,777 3,442 3,637 3,776 4,171 4,323 4,812 Engineering 107 182 174 121 171 145 189 206 212 Sciences 3,206 4,389 3,603 3,321 3,466 3,631 3,982 4,117 4,600 Natural sciences 903 1,125 956 875 831 963 1,166 1,206 1,447 Physical science¹ 61 103 92 106 89 114 123 133 148 Mathematical science 91 152 136 98 107 99 104 106 115 Computer science 438 408 231 169 142 149 161 143 236 Biological science 298 417 452 408 389 502 618 653 766 Agricultural science 15				J.S. citizens	and permar	nent resident	s, unknown	race/ethnicit	у	
Engineering 107	Total, all Fields	12,606	17,717	13,437	12,121	12,806	12,893	13,927	14,287	15,260
Sciences 3,206 4,389 3,603 3,321 3,466 3,631 3,982 4,117 4,600 Natural sciences 903 1,125 956 875 831 963 1,166 1,206 1,447 Physical science 1 61 103 92 106 89 114 123 133 148 Mathematical science 91 152 136 98 107 99 104 106 113 Computer science 438 408 231 169 142 149 161 143 236 Biological science 298 417 452 408 389 502 618 653 768 Agricultural science 15 45 45 94 104 99 160 171 18 Social sciences 2,303 3,264 2,647 2,446 2,635 2,668 2,816 2,911 3,153 Social science 1,411 <	Science and engineering	3,313	4,571	3,777	3,442	3,637	3,776	4,171	4,323	4,812
Natural sciences 903 1,125 956 875 831 963 1,166 1,206 1,447 Physical science 1 61 103 92 106 89 114 123 133 144 Mathematical science 91 152 136 98 107 99 104 106 115 Computer science 438 408 231 169 142 149 161 143 236 Biological science 298 417 452 408 389 502 618 653 766 Agricultural science 15 45 45 94 104 99 160 171 181 Social sciences 2,303 3,264 2,647 2,446 2,635 2,668 2,816 2,911 3,153 Social science 1,411 1,870 1,564 1,457 1,504 1,525 1,601 1,723 1,817 Psychology 892	Engineering	107	182	174	121	171	145	189	206	212
Agricultural science 15 45 45 94 104 99 160 171 181 Social sciences 2,303 3,264 2,647 2,446 2,635 2,668 2,816 2,911 3,155 Social science 1,411 1,870 1,564 1,457 1,504 1,525 1,601 1,723 1,817 Psychology 892 1,394 1,083 989 1,131 1,143 1,215 1,188 1,336	Natural sciences Physical science 1 Mathematical science	903 61 91	1,125 103 152	956 92 136	875 106 98	831 89 107	963 114 99	1,166 123 104	1,206 133 106	4,600 1,447 148 113 236
Social science 1,411 1,870 1,564 1,457 1,504 1,525 1,601 1,723 1,817 Psychology 892 1,394 1,083 989 1,131 1,143 1,215 1,188 1,336										769 181
Non-S&E ²	Social science	1,411	1,870	1,564	1,457	1,504	1,525	1,601	1,723	3,153 1,817 1,336
	Non-S&E ²	9.293	13,146	9,660	8,679	9,169	9,117	9,756	9,964	10,448

See explanatory information and SOURCE at end of table.

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Page 4 of 4

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997		
	Nonresident aliens ⁴										
Total, all Fields	9,340	9,645	11,430	11,441	13,319	14,484	15,896	16,356	17,151		
Science and engineering	3,280	3.382	3,741	3,897	4.408	4,467	4,820	5,061	5,235		
Engineering	473	490	470	471	464	548	566	620	676		
Sciences	2,807 1,520 199 196 618	2,892 1,470 180 200 594	3,271 1,561 197 204 574	3,426 1,563 190 234 555	3,944 1,815 239 207 603	3,919 1,719 246 198 606	4,254 1,859 250 235 627	4,441 1,892 249 172 607	4,559 1,897 240 206 568		
Biological science Agricultural science	447 60	436 60	519 67	514 70	648 118	580 89	659 88	752 112	791 92		
Social sciences Social science Psychology	1,287 946 341	1,422 1,057 365	1,710 1,197 513	1,863 1,374 489	2,129 1,519 610	2,200 1,552 648	2,395 1,685 710	2,549 1,808 741	2,662 1,868 794		
Non-S&E ²	6,060	6,263	7,689	7,544	8,911	10,017	11,076	11,295	11,916		

¹ In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey

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27

Non-S&E refers to non-science and non-engineering.

³ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

⁴ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

								Pa	age 1 of 4			
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997			
					Total		_					
Total, all Fields	311,050	324.947	338.498	354,207	370,973	389.008	399.428	408,932	420.954			
Science and engineering	70.333	72.228	72,828	76,184	81,415	86.080	88,431	88,730	86,697			
Engineering	23,735	23,985	24,007	25.010	27,658	28,707	28,617	27,757	25,870			
Sciences Natural sciences Physical science Mathematical science Computer science	46,598 26,089 5,703 3,430 9,399	48,243 26,293 5,411 3,684 9,643	48,821 25,669 5,282 3,632 9,324	51,174 26,775 5,352 4,019 9,530	53,757 27,713 5,365 4,084 10,167	57,373 28,869 5,688 4,108 10,421	59,814 29,292 5,735 4,190 10,332	60,973 30,353 5,854 4,037 10,223	60,827 29,919 5,579 3,790 10,107			
Biological science Agricultural science	4,953 2,604	4,893 2,662	4,806 2,625	4,816 3,058	4,798 3,299	5,217 3,435	5,423 3,612	6,207 4,032	6,497 3,946			
Social sciencesSocial science	20,509 11,857 8,652	21,950 12,642 9,308	23,152 13,350 9,802	24,399 14,119 10,280	26.044 15,024 11,020	28,504 16,230 12,274	30,522 16,501 14,021	30,620 16,758 13,862	30.908 16,466 14,442			
Non-S&E ²	240,717	252,719	265,670	278,023	289,558	302,928	310,997	320,202	334,257			
·		U.S. citizens and permanent residents, total ³										
Total, all Fields	278,927	290,345	300,887	314,555	326,864	342,502	350,672	360,682	371,477			
Science and engineering	55,190	55,890	55,779	58,177	61,265	65,201	67,110	68,151	66,609			
Engineering	16,988	16,746	16,487	17,111	18,539	19,350	18,921	18,762	17,236			
Sciences Natural sciences Physical science 1 Mathematical science Computer science	38,202 20,167 4,465 2,454 6,957	39,144 19,963 4,047 2,649 7,080	39,292 18,935 3,778 2,573 6,505	41,066 19,459 3,814 2,907 6,361	42,726 19,651 3,763 2,946 6,388	45,851 20,451 3,918 3,013 6,509	48,189 20,957 3,980 3,034 6,452	49,389 22,028 4,119 2,956 6,352	49,373 21,764 3,933 2,789 6,172			
Biological science	4,317 1,974	4,164 2,023	4,057 2,022	4,021 2,356	3,949 2,605	4,284 2,727	4,543 2,948	5.230 3,371	5,589 3,281			
Social sciences Social science Psychology	18,035 9,642 8,393	19,181 10,258 8,923	20,357 10,872 9,485	21.607 11,629 9,978	23.075 12,387 10,688	25,400 13,487 11,913	27,232 13,695 13,537	27,361 13,938 13,423	27,609 13,584 14,025			
Non-S&E ²	223,737	234,455	245,108	256,378	265,599	277,301	283,562	292,531	304,868			
				Whit	e, non-Hispa	anics						
Total, all Fields	230,322	236,874	247,524	257,062	265,668	273,913	277,437	282,713	288,353			
Science and engineering	43,945	44,450	44,513	45,649	47,975	50,711	51,417	51,791	50,288			
Engineering	12,832	12,859	12,635	12,752	13,920	14,469	13,821	13,573	12,490			
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	31,113 16,080 3,766 2,032 4,786	31,591 15,742 3,401 2,169 4,851	3,129 2,068	32,897 15,136 3,067 2,336 4,407	3,078 2,354	36,242 15,524 3,145 2,379 4,286	37,596 15,789 3,179 2,342 4,205	38,218 16,672 3,326 2,227 4,113	37,798 16,347 3,173 2,145 3,868			
Biological science	3,679 1,817	3,501 1,820		3,251 2,075		3,453 2,261	3,589 2,474	4,080 2,926				
Social sciencesSocial science	15,033 7,958 7,075	15,849 8,360 7,489	8,900	17,761 9,523 8,238	9,923	20,718 10,758 9,960	10,700		21,451 10,350 11,101			
Non-S&E ²	186,377	192,424	203,011	211,413	217,693	223,202	226,020	230,922	238,065			

See explanatory information and SOURCE at end of table.

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								Pa	ge 2 of 4
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
			_		Asians				
Total, all Fields	10,174	9,994	11,070	12,293	13,169	14,559	15,906	17,281	17,912
Science and engineering	4,100	4,055	4,310	4,763	4,846	5,422	5,683	5,942	5,845
Engineering	1,992	1,863	2,008	2,223	2,260	2,443	2,572	2,621	2,319
Sciences Natural sciences Physical science Mathematical science Computer science	2,108 1,617 278 178 894	2,192 1,629 234 184 941	2,302 1,735 251 189 1,014	2,540 1,916 295 201 1,105	2,586 1,918 249 197 1,106	2,979 2,159 284 233 1,228	3,111 2,280 288 239 1,239	3,321 2,405 304 235 1,237	3,526 2,487 308 248 1,268
Biological scienceAgricultural science	223 44	225 45	231 50	264 51	305 61	332 82	417 97	519 110	558 105
Social sciences Social science Psychology	491 360 131	563 404 159	567 397 170	624 441 183	668 477 191	820 550 270	831 533 298	916 586 330	1,039 665 374
Non-S&E ²	6,074	5,939	6,760	7,530	8,323	9,137	10,223	11,339	12.067
	·		,	Underrepre	sented mino	rities, total			
Total, all Fields	22,670	24,018	26,666	28,904	31,612	35,731	38,401	41,675	45,152
Science and engineering	3,446	3,615	4,026	4,360	4,899	5,636	6,223	6,552	7,031
Engineering	856	868	906	996	1,195	1,368	1,419	1,478	1,492
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	2,590 1,025 188 99 381	2,747 1,002 194 127 357	3,120 1,195 182 194 425	3,364 1,258 209 147 480	3,704 1,358 231 184 484	4,268 1,569 257 190 552	4,804 1,625 295 237 561	5,074 1,680 253 248 576	5,539 1,826 299 242 599
Biological scienceAgricultural science	267 90	244 80	286 108	307 115	312 147	297 273	349 183	406 197	467 219
Social sciences	1,565 777 788	1,745 868 877	1,925 1,031 - 894	2,106 1,118 988	2,346 1,282 1,064	2,699 1,443 1,256	3,179 1,575 1,604	3,394 1,658 1,736	3,713 1,719 1,994
Non-S&E ²	19,224	20,403	22,640	24,544	26,713	30,095	32,178	35,123	38,121
				Blac	k, non-Hispa	inics			
Total, all Fields	13,455	14,473	15,857	17,420	18,897	20,936	22,954	24,588	26,948
Science and engineering	1,652	1,847	2,090	2,356	2,554	2,849	3,339	3,518	3,817
Engineering	355	387	398	İ		589	665	674	674
Sciences Natural sciences Physical science 1 Mathematical science Computer science	1,297 495 78 59 198	1,460 527 87 70 232	644 73 100	77	716 105 98	2,260 821 127 109 365	2,674 881 147 151 347	2,844 932 116 151 379	3,143 1,010 144 157 377
Biological science	124 36	110 28	137 51			142 78	162 74	198 88	236 96
Social sciences	802 407 395	933 462 471		660	730	1,439 803 636	1,793 930 863	1,912 965 947	2,133 1,010 1,123
Non-S&E ²	11,803	12,626	13,767	15,064	16,343	18,087	19,615	21,070	23,131

See explanatory information and SOURCE at end of table.

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								Р	age 3 of 4
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Hispanics			•	
Total, all Fields	8,133	8,495	9.684	10,256	11,371	13,177	13,905	15,394	16.360
Science and engineering	1.585	1,587	1.736	1,806	2,092	2,514	2,585	2.730	2.882
Engineering	468	446	468	488	581	719	711	748	765
Sciences Natural sciences Physical science 1 Mathematical science	1,117 444 92 34	1,141 431 98 51	1,268 494 96 85	1,318 503 93 66	1,511 574 114 78	1,795 680 114 75	1,874 665 129 75	1,982 677 127 91	2,117 720 139 71
Computer science	144 126 48	118 120 44	128 136 49	149 146 49	162 151 69	169 138 184	198 167 96	173 191 95	197 208 105
Social sciences	673 313 360	710 341 369	774 383 391	815 396 419	937 474 463	1,115 557 558	1,209 553 656	1,305 596 709	1,397 626 771
Non-S&E ²	6,548	6,908	7,948	8,450	9.279	10,663	11,320	12,664	13,478
			,	American Inc	dians or Alas	kan Natives		· <u>1</u>	
Total, all Fields	1,082	1,050	1,125	1,228	1,344	1,618	1,542	1,693	1,844
Science and engineering	209	181	200	198	253	273	299	304	332
Engineering	33	35	40	42	50	60	43	56	53
Sciences Natural sciences Physical science 1 Mathematical science Computer science	176 86 18 6 39	146 44 9 6 7	160 57 13 9 14	156 56 18 4 15	203 68 12 8 14	213 68 16 6 18	256 79 19 11 16	248 71 10 6 24	279 96 16 14 25
Biological science	17 6	14 8	13 8	12 7	26 8	17 11	20 13	17 14	23 18
Social sciences Social science Psychology	90 57 33	102 65 37	103 54 49	100 62 38	78	145 83 62	177 92 85	177 97 80	183 83 100
Non-S&E ²	873	869	925	1,030	1,091	1,345	1,243	1,389	1,512
		ι	J.S. citizens	and perman	ent resident	s, unknown	race/ethnicit	у	-
Total, all Fields	15,761	19,459	15,627	16,296	16,415	18,299	18,928	19,013	20,060
Science and engineering	3,699	3,770	2,930	3,405	3,545	3,432	3,787	3,866	3,445
Engineering	1,308	1,156	938	1,140	1,164	1,070	1,109	1,090	935
Sciences Natural sciences Physical science Mathematical science Computer science	2,391 1,445 233 145 896	2,614 1,590 218 169 931	1,992 1,000 216 122 429	2,265 1,149 243 223 369	1,053 205 211	2,362 1,199 232 211 443	2,678 1,263 218 216 447	2,776 1,271 236 246 426	2.510 1,104 153 154 437
Biological science	148 23	194 78	187 46	199 115		202 111	188 194	225 138	222 138
Social sciences Social science Psychology	946 547 399	1,024 626 398	544	1,116 547 569	705	1,163 736 427	1,415 887 528	1,505 887 618	1,406 850 556
Non-S&E ²	12,062	15,689	12.697	12,891	12,870	14,867	15,141	15,147	16,615

See explanatory information and SOURCE at end of table.



Page 4 of 4 1997 1994 1995 1996 1989 1990 1991 1992 1993 Field Nonresident aliens 4 49,477 37,611 39,652 44,109 46,506 48,756 48,250 32,123 34,602 Total, all Fields 20,879 21,321 20,579 20,088 16,338 17.049 18.007 20.150 15,143 Science and engineering 8,995 8,634 9,357 9,696 6,747 7,239 7,520 7,899 9,119 Engineering 11,625 11,522 11,584 11.454 11,031 10.108 8,396 9,099 9.529 Sciences

Natural sciences

Physical science 1 8,418 1,770 8,325 1,735 8,335 8.155 6,330 1,364 6,734 1,504 7,316 8,062 5,922 1,238 1,646 1,755 1,156 1,538 1,602 1,081 1,001 1,138 3,779 1.095 1,035 1,059 1,112 Mathematical science 3,871 3,935 3,912 3,880 3,169 2,442 2,563 2,819 Computer science 908 977 933 880 636 749 795 849 Biological science 708 664 661 665 630 639 603 702 694 Agricultural science 3,259 3,299 2,769 2,384 2,792 2,490 3,290 2,474 2,795 2,969 3.104 Social sciences 2,806 2,820 2,882 2,637 332 2,743 2,215 2,478 Social science 484 439 417 Psychology 259 385 317 302 27.435 27,671 29,389 25.627 18,264 20,562 21,645 23,959 16,980 Non-S&E²

NOTES:

Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in each category.

SOURCE:

Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey



In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

Non-S&E refers to non-science and non-engineering.

³ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

⁴ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

	,							P	Page 1 of 4		
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997		
					Total				_		
Total, all Fields	149,399	154.025	156,895	162,299	169,753	176,762	179,198	180,360	181,457		
Science and engineering	47,724	48,424	47,748	49,768	53,102	55,461	55,803	54.928	52,181		
Engineering	20.654	20,717	20,650	21,345	23,565	24.286	23,986	23,005	21,176		
Sciences Natural sciences Physical science Mathematical science Computer science	27,070 17,250 4,180 2,060 6,773	27,707 17,258 3,981 2,208 6,968	27.098 16,530 3,825 2,146 6,563	28,423 17,480 3,895 2,457 6,884	29,537 18,076 3,803 2,468 7,411	31,175 18,813 4,030 2,541 7,727	31,817 18,926 4,000 2,549 7,630	31,923 19,185 3,968 2,468 7,500	31,005 18,551 3,758 2,245 7,252		
Biological science	2.491 1,746	2.393 1.708	2,315 1,681	2,316 1,928	2.365 2.029	2,475 2,040	2,616 2,131	2.925 2.324	3.048 2,248		
Social sciences Social science Psychology	9,820 7,006 2,814	10,449 7,424 3,025	10,568 7,574 2,994	10,943 7,939 3,004	11,461 8,419 3,042	12.362 8,945 3,417	12,891 8,981 3,910	12,738 8,910 3,828	12,454 8,585 3,869		
Non-S&E ²	101,675	105,601	109,147	112,531	116,651	121,301	123,395	125,432	129,276		
		U.S. citizens and permanent residents, total ³									
Total, all Fields	126,777	130,326	131,745	136,062	140,932	146,621	148,039	150,310	151,256		
Science and engineering	35,681	35,722	34,667	36,063	37,737	39,700	39,784	39,968	37,795		
Engineering	14.446	14,174	13,977	14,350	15,542	16,140	15,624	15,402	13,990		
Sciences Natural sciences Physical science Mathematical science Computer science	21,235 12,985 3,226 1,428 4,925	21,548 12,819 2,953 1,559 5,035	20,690 11,839 2,755 1,463 4,419	21,713 12,393 2,784 1,745 4,504	22,195 12,504 2,685 1,717 4,600	23,560 12,985 2,794 1,803 4,779	24,160 13,134 2,778 1,765 4,725	24,566 13,545 2,781 1,758 4,613	23,805 13,085 2,618 1,582 4,416		
Biological science	2,134 1,272	2,014 1,258	1,945 1,257	1,931 1,429	1,959 1,543	2.013 1,596	2,164 1,702	2,470 1,923	2,638 1,831		
Social sciences Social science Psychology	8.250 5.535 2,715	8,729 5,840 2,889	8,851 5,961 2,890	9,320 6,411 2,909	9,691 6,760 2,931	10,575 7,288 3,287	11,026 7,264 3,762	11,021 7,317 3,704	10,720 6,978 3,742		
Non-S&E ²	91,096	94,604	97,078	99,999	103,195	106,921	108,255	110,342	113,461		
				White	e, non-Hispa	nics					
Total, all Fields	104,042	106,075	107,917	110,797	113,717	116,758	116,655	117,559	117,942		
Science and engineering	28,115	28.250	27,634	28,113	29,493	30,846	30,464	30,591	28,930		
Engineering	10,874	10,922	10,742	10,775	11,777	12.232	11,581	11,383	10,385		
Sciences Natural sciences Physical science 1 Mathematical science Computer science	17,241 10,357 2,750 1,173 3,430	17,328 10,116 2,518 1,275 3,474	16.892 9,491 2.299 1,169 3,260	17.338 9,675 2,234 1,389 3,236	17,716 9,837 2,229 1,332 3,326	18,614 9,964 2,252 1,420 3,309	18,883 10,031 2,256 1,354 3,231	19,208 10,429 2,288 1,326 3,170	18.545 10,104 2,172 1,239 2,978		
Biological science	1,830 1,174	1,711 1,138	1,629 1,134	1,566 1,250	1.593 1,357	1,643 1,340	1,740 1,450	1,958 1,687	2,108 1,607		
Social sciences Social science Psychology	6,884 4,592 2,292	7,212 4,781 2,431	7,401 4,981 2,420	7,663 5,276 2,387	7,879 5,453 2,426	8,650 5,880 2,770	8,852 5,750 3,102	8,779 5,758 3,021	8,441 5,428 3,013		
Non-S&E ²	75,927	77.825	80,283	82.684	84,224	85,912	86,191	86,968	89,012		

See explanatory information and SOURCE at end of table.





					_		_	Pag	ge 2 of 4
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Asians				
Total, all Fields	5,917	5.670	6,220	6,823	7,125	7,791	8,385	8,877	8,585
Science and engineering	2,939	2,799	2,959	3,276	3,237	3,561	3,733	3,726	3,453
Engineering	1,699	1.557	1,685	1,816	1,819	1,932	2,023	2,000	1,758
Sciences	1,240 990 179 117 565	1,242 976 140 106 609	1,274 1,031 165 108 627	1,460 1,169 206 103 705	1.418 1,149 150 121 710	1,629 1,279 182 126 785	1,710 1,359 187 134 785	1,726 1,361 168 132 775	1.695 1.324 168 125 755
Biological scienceAgricultural science	105 24	97 24	104 27	125 30	136 32	151 35	209 44	237 49	244 32
Social sciencesSocial science	250 206 44	266 224 42	243 196 47	291 229 62	269 219 50	350 276 74	351 272 79	365 287 78	371 285 86
Non-S&E ²	2,978	2,871	3,261	3,547	3,888	4,230	4,652	5,151	5,132
				Underrepre	esented mino	rities, total			
Total, all Fields	9,039	9,321	10,207	10,676	11,903	13,144	13,984	14,735	15,607
Science and engineering	1,990	2.005	2,129	2.340	2,637	2.964	3,143	3,197	3,370
Engineering	685	687	711	775	924	1,052	1,082	1,095	1,084
Sciences Natural sciences Physical science 1 Mathematical science Computer science	1,305 639 133 58 255	1,318 610 130 74 238	1,418 664 124 112 244	1,565 728 144 92 283	764 142 102	1,912 899 167 111 337	2,061 905 185 122 361	2,102 912 145 140 347	2,286 975 171 135 365
Biological scienceAgricultural science	129 64	120 48	116 68	137 72		125 159	136 101	170 110	187 117
Social sciences Social science Psychology	666 416 250	708 429 279	754 482 272	837 556 281	672	1,013 692 321	1,156 734 422	1,190 749 441	1,311 809 502
Non-S&E ²	7,049	7,316	8,078	8,336	9.266	10,180	10,841	11,538	12,237
				Bla	ck, non-Hispa	anics			
Total, all Fields	4,964	5.169	5,619	5,794	6,472	7,007	7,636	7,998	8,444
Science and engineering		950	1,028	1,166	1.253	1,376	1.534	1,565	1,617
Engineering	262	287	299	332	407	422	464	464	449
Sciences Natural sciences Physical science 1 Mathematical science Computer science	56 32	37	338 43 53	382 3 66	386 5 58 4 48	435 74 62	434 86 64	467 59 78	1,168 484 74 77 208
Biological scienceAgricultural science	59	51 18							
Social sciences Social science Psychology	326 206	223	262	2 31	5 345	358	418	3 391	426 258
Non-S&E ²	1	4,219	4,59	1 4,62	5.219	5,631	6,10	6.433	6,827

See explanatory information and SOURCE at end of table.

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								F	age 3 of 4		
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997		
					Hispanics						
Total, all Fields	3.597	3,713	4,124	4,381	4,875	5,483	5,725	6,072	6,466		
Science and engineering	970	959	992	1,066	1,255	1,427	1,458	1,478	1.576		
Engineering	394	373	378	408	480	582	578	580	589		
Sciences Natural sciences	576 282	586	614	658	775	845	880	898	987		
Physical science ¹	65	275 63	294 73	309 64	341 76	414 80	423 88	402 80	435 86		
Mathematical science Computer science	21 100	33 93	52 84	47 98	50	44	53	57	50		
Biological science	62	61	54		104	120	151	125	141		
Agricultural science	34	25	31	69 31	76 35	65 105	75 56	85 55	107 51		
Social sciencesSocial science	294 176	311 178	320 196	349 218	434 282	431	457	496	552		
Psychology	118	133	124	131	152	290 141	283 174	320 176	344 208		
Non-S&E ²	2,627	2,754	3,132	3,315	3,620	4,056	4,267	4,594	4.890		
	American Indians or Alaskan Natives										
Total, all Fields	478	439	464	501	556	654	623	665	697		
Science and engineering	142	96	109	108	129	161	151	154	177		
Engineering	29	27	34	35	37	48	40	51	46		
Sciences	113	69	75	73	92	113	111	103	131		
Natural sciences Physical science ¹	67 12	28 6	32 8	37 14	37 8	50 13	48 11	43 6	56 11		
Mathematical science Computer science	5 36	4 5	7 10	1 10	4	5	5	5	.8		
	- 1				11	12	11	17	16		
Biological science	8	8 5	3	7 5	9 5	12 8	11 10	9 6	11 10		
Social sciences	46 34	41 28	43	36	55	63	63	60	75		
Psychology	12	13	24 19	23 13	45 10	44 19	33 30	38 22	39 36		
Non-S&E ²	336	343	355	393	427	493	472	511	520		
		U.	S. citizens a	and permane	ent residents	s, unknown	race/ethnicity	l			
Total, all Fields	7,779	9,260	7,401	7,766	8,187	8,928	9,015	9,139	9,122		
Science and engineering	2,637	2,668	1,945	2,334	2,370	2,329	2,444	2,454	2,042		
Engineering	1,188	1,008	839	984	1,022	924	938	924	763		
Sciences	1,449 999	1,660 1,117	1,106	1,350	1,348	1,405	1,506	1,530	1,279		
Physical science ¹	164	165	653 167	821 200	754 164	843 193	839 150	843 180	682 107		
Mathematical science	80 675	104 714	74 288	161 280	162 256	146 348	155 348	160 321	83 318		
Biological science	70 10	86 48	96 28	103 77	98 74	94 62	†9 107	105 77	99 75		
Social sciences	450	543	453	529	594	562	667	687	597		
Social science Psychology	321 129	406 137	302 151	350 179	416 178	440	508	523 164	456		
Non-S&E ²	5,142	6,592				122	159	ļ	141		
1011 002	5, 142	0,332	5,456	5,432	5,817	6.599	6,571	6,685	7.080		

See explanatory information and SOURCE at end of table.

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Page 4 of 4

									- 3-
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	•		1	Nor	resident alie	ens ⁴			
Total, all Fields	22,622	23,699	25,150	26,237	28,821	30,141	31,159	30,050	30,201
Science and engineering	12,043	12,702	13,081	13,705	15,365	15,761	16,019	14.960	14,386
Engineering	6,208	6,543	6,673	6,995	8,023	8,146	8,362	7,603	7,186
Sciences	5,835 4,265 954 632 1,848	6,159 4,439 1,028 649 1,933	6.408 4,691 1,070 683 2,144	6,710 5,087 1,111 712 2,380	7,342 5,572 1,118 751 2,811	7,615 5,828 1,236 738 2,948	7,657 5,792 1,222 784 2,905	7,357 5,640 1,187 710 2,887	7,200 5,466 1,140 663 2,836
Biological scienceAgricultural science	357 474	379 450	370 424	385 499	406 486	462 444	452 429	455 401	410 417
Social sciences Social science Psychology	1,570 1,471 99	1,720 1,584 136	1,717 1,613 104	1,623 1,528 95	1,770 1,659 111	1,787 1,657 130	1,865 1,717 148		1,734 1,607 127
Non-S&E ²	10,579	10,997	12,069	12,532	13,456	14,380	15,140	15,090	15,815

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES:

Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in each category.

SOURCE:

Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey

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37

Non-S&E refers to non-science and non-engineering.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

⁴ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

								Р	age 1 of 4
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Total				
Total, all Fields	161,651	170,922	181,603	191,908	201,220	212,246	220.230	228,572	239.497
Science and engineering	22,609	23.804	25.080	26,416	28,313	30,619	32.628	33.802	34,516
Engineering	3,081	3.268	3,357	3,665	4,093	4,421	4.631	4.752	4.694
Sciences Natural sciences Physical science Mathematical science Computer science	19,528 8,839 1,523 1,370 2,626	20.536 9.035 1.430 1,476 2.675	21,723 9,139 1,457 1,486 2,761	22,751 9,295 1,457 1,562 2,646	24,220 9,637 1,562 1,616 2,756	26,198 10,056 1,658 1,567 2,694	27,997 10,366 1,735 1,641 2,702	29,050 11,168 1,886 1,569 2,723	29,822 11,368 1,821 1,545 2,855
Biological science	2.462 858	2,500 954	2,491 944	2,500 1,130	2.433 1,270	2,742 1,395	2,807 1,481	3,282 1,708	3,449 1,698
Social sciences Social science Psychology	10,689 4,851 5,838	11.501 5,218 6,283	12,584 5,776 6,808	13,456 6,180 7,276	14,583 6,605 7,978	16,142 7,285 8,857	17,631 7,520 10,111	17,882 7,848 10.034	18,454 7,881 10,573
Non-S&E ²	139,042	147,118	156,523	165,492	172,907	181,627	187,602	194,770	204,981
			U.S	citizens and	d permanent	residents, t	otal 3		
Total, all Fields	152,150	160,019	169,142	178,493	185,932	195,881	202,633	210,372	220,221
Science and engineering	19,509	20,168	21,112	22,114	23.528	25,501	27,326	28.183	28,814
Engineering	2,542	2,572	2,510	2,761	2,997	3,210	3,297	3,360	3,246
Sciences Natural sciences Physical science Mathematical science Computer science	16,967 7,182 1,239 1,026 2,032	17,596 7,144 1,094 1,090 2,045	18,602 7,096 1,023 1,110 2,086	19,353 7.066 1,030 1,162 1,857	20,531 7,147 1,078 1,229 1,788	22,291 7,466 1,124 1,210 1,730	24,029 7,823 1,202 1,269 1,727	24,823 8,483 1,338 1,198 1,739	25,568 8,679 1,315 1,207 1,756
Biological science	2,183 702	2,150 765	2,112 765	2,090 927	1,990 1,062	2,271 1,131	2,379 1,246	2,760 1,448	2,951 1,450
Social sciences Social science Psychology	9,785 4,107 5,678	10,452 4,418 6,034	11,506 4,911 6,595	12,287 5.218 7,069	13,384 5,627 7,757	14,825 6,199 8,626	16,206 6,431 9,775	16,340 6,621 9,719	16,889 6,606 10,283
Non-S&E ²	132,641	139,851	148,030	156,379	162,404	170,380	175,307	182,189	191,407
				Whit	e, non-Hispa	anics			
Total, all Fields	126.280	130,799	139.607	146,265	151,951	157,155	160,782	165,154	170,411
Science and engineering	15,830	16,200	16,879	17,536	18,482	19.865	20,953	21,200	21,358
Engineering	1,958	1,937	1,893	1,977	2,143	2,237	2,240	2,190	2,105
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	13.872 5,723 1,016 859 1,356	14,263 5,626 883 894 1,377	14,986 5,514 830 899 1,377	15,559 5,461 833 947 1,171	16,339 5,485 849 1,022 1,138	17,628 5,560 893 959 977	18,713 5,758 923 988 974	19,010 6,243 1,038 901 943	19,253 6,243 1,001 906 890
Biological science	1.849 643	1,790 682	1,724 684	1,685 825	1,551 925	1,810 921	1,849 1,024	2,122 1,239	2.234 1,212
Social sciences Social science Psychology	8,149 3,366 4,783	8,637 3,579 5,058	9.472 3.919 5.553	10,098 4,247 5,851	10,854 4,470 6,384	12,068 4,878 7,190	12,955 4,950 8,005	12,767 5,049 7,718	13.010 4,922 8,088
Non-S&E ²	110,450	114,599	122,728	128,729	133,469	137,290	139,829	143,954	149,053

See explanatory information and SOURCE at end of table.

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								P	age 2 of 4
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Asians		•		
Total, all Fields	4,257	4,324	4,850	5,470	6,044	6,768	7,521	8,404	9.327
Science and engineering	1,161	1,256	1,351	1,487	1,609	1,861	1,950	2,216	2.392
Engineering	293	306	. 323	407	441	511	549	621	561
Sciences Natural sciences Physical science Mathematical science Computer science	868 627 99 61 329	950 653 94 78 332	1,028 704 86 81 387	1,080 747 89 98 400	1,168 769 99 76 396	1,350 880 102 107 443	1,401 921 101 105 454	1,595 1,044 136 103 462	1.831 1,163 140 123 513
Biological science Agricultural science	118 20	128 21	127 23	139 21	169 29	181 47.	208 53	282 61	314 73
Social sciences Social science	241 154 87	297 180 117	324 201 123	333 212 121	399 258 141	470 274 196	480 261 219	551 299 252	668 380 288
Non-S&E ²	3,096	3,068	3,499	3,983	4.435	4,907	5,571	6,188	6,935
				Underrepre	sented mind	orities, total	1		
Total, all Fields	13,631	14,697	16,459	18.228	19,709	22,587	24,417	26,940	29.545
Science and engineering	1,456	1,610	1,897	2,020	2,262	2,672	3,080	3,355	3,661
Engineering	171	181	195	221	271	316	337	383	408
Sciences Natural sciences Physical science¹ Mathematical science Computer science	1.285 386 55 41 126	1,429 392 64 53 119	1,702 531 58 82 181	1,799 530 65 55 197	1,991 594 89 82 176	2,356 670 90 79 215	2,743 720 110 115 200	2.972 768 108 108 229	3.253 851 128 107 234
Biological scienceAgricultural science	138 26	124 32	170 40	170 43	180 67	172 114	213 82	236 87	280 102
Social sciences	899 361 538	1,037 439 598	1,171 549 622	1,269 562 707	1,397 -610 787	1,686 751 935	2,023 841 1,182	2,204 909 1,295	2,402 910 1,492
Non-S&E ²	12,175	13,087	14,562	16,208	17,447	19,915	21,337	23,585	25,884
				Blac	k, non-Hispa	inics			
Total, all Fields	8,491	9,304	10.238	11,626	12,425	13,929	15,318	16,590	18,504
Science and engineering	774	897	1,062	1,190	1,301	1,473	1,805	1,953	2.200
Engineering	93	100	99	134	157	167	201	210	225
Sciences Natural sciences Physical science 1 Mathematical science Computer science	681 205 22 27 79	797 220 26 33 92	963 306 30 47 133	1,056 317 32 33 141	1,144 330 47 50 115	1,306 386 53 47 160	1,604 447 61 87 148	1,743 465 57 73 174	1,975 526 70 80 169
Biological scienceAgricultural science	65 12	59 10	79 17	88 23	88 30	94 32	112 39	122 39	167 40
Social sciences Social science Psychology	476 201 275	577 239 338	657 332 325	739 345 394	814 385 429	920 445 475	1,157 512 645	1,278 574 704	1,449 584 865
Non-S&E ²	7,717	8,407	9,176	10,436	11,124	12,456	13,513	14,637	16,304

See explanatory information and SOURCE at end of table.

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Page 3 of 4 Field Hispanics 4.536 4,782 5.560 6.496 7.694 9.322 9,894 5,875 8,180 Total, all Fields Science and engineering 1,087 1,127 1,252 1,306 Engineering ,..... 1,130 1.084 Sciences Natural sciences Physical science 1 29 38 Mathematical science Computer science Biological science Agricultural science Social sciences Social science Psychology 4,154 8,588 Non-S&E² 3,921 4,816 5,135 5,659 6,607 7.053 8,070 American Indians or Alaskan Natives 1,028 1.147 Total, all Fields Science and engineering Engineering Sciences Natural sciences
Physical science 1 4 3 5 2 4 Mathematical science Computer science Biological science Agricultural science Social sciences Social science Psychology 21 24 30 47 Non-S&E² U.S. citizens and permanent residents, unknown race/ethnicity 7,982 10,199 8,530 9.874 10.938 8,228 9.371 9,913 Total, all Fields 1,062 1,102 1.071 1,412 1,403 1.175 1,103 Science and engineering 1,343 Engineering 1,033 1,246 1,231 1,172 Sciences Natural sciences

Physical science¹ 95 Mathematical science 78 Computer science Biological science 38 Agricultural science Social sciences Social science Psychology 9,535 6.920 9 097 7,241 8.462 7.459 8.570 Non-S&E² 7.053 8,268

See explanatory information and SOURCE at end of table.



Page 4 of 4 1989 1990 1991 1992 1993 1994 1995 1996 1997 Field Nonresident aliens 4 10,903 12,461 15,288 16,365 17,597 18,200 19,276 9.501 13,415 Total, all Fields 3,636 3,968 4,302 4,785 5,302 5 6 1 9 5.702 3,100 5.118 Science and engineering 696 847 904 1.096 1,211 1,334 1,392 1,448 539 Engineering 4,227 4,254 3 968 2.561 2.940 3,121 3,398 3.689 3.907 Sciences Natural sciences
Physical science 1 1,891 2 590 2,543 533 2,685 1,657 284 2,043 2,229 427 2,490 484 506 338 434 534 548 336 386 376 400 387 357 372 371 Mathematical science 1.099 984 975 594 630 675 789 968 964 Computer science 498 279 350 410 428 522 260 248 156 189 179 203 208 264 235 1,565 904 1,049 1,078 1,169 1,199 1,425 1,542 Social sciences 1,227 744 800 865 962 978 1,086 1,089 Social science 290 336 Psychology 160 249 213 207 221 231 13,574 12.581 7,267 8,493 9,113 10,503 11,247 12,295 Non-S&E²

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey



41

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

Non-S&E refers to non-science and non-engineering.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

⁴ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

Page 1 of 4 1989 Field 1990 1991 1992 1993 1994 1995 1996 1997 Total Total, all Fields 34,327 36.067 37,534 38,890 39,801 41,034 41,743 42,414 42.555 21,732 22,868 24,023 Science and engineering 24,675 25,443 26,205 26,535 27,229 27,180 Engineering 4,543 4.894 5,214 5,438 5,698 5,822 6,008 6,305 6,098 17.974 18.809 Sciences 17.189 19,237 19,745 20,383 20.527 20.924 21.082 Natural sciencesPhysical science 1 11,361 10.657 12.003 12.364 12.556 13,220 13,434 4,631 13.422 4,470 3.984 4,801 4,637 4,621 Mathematical science 859 892 1,039 1,058 1,146 1,118 1,190 1,122 1,125 Computer science 612 705 800 869 880 903 997 921 905 Biological science 4,116 4,328 4,650 4,799 5,092 5,203 5,777 Agricultural science 1.086 1.174 1.073 1,063 968 1,078 1.036 1,037 978 6,613 6,806 6,873 Social sciences 7,189 7,280 7,307 7,490 7,660 Social science 3,324 3,332 3,556 3,878 3,999 4,094 Psychology 3,281 3.208 3,250 3.263 3,420 3,379 3,429 3 491 3.566 12,595 13,199 13,511 15.375 Non-S&E² 14,215 14,358 14,829 15,208 15,185 U.S. citizens and permanent residents, total 3 Total, all Fields 25,027 26,603 27,430 27.990 28,708 30.894 32,059 31.506 30.862 14,592 15.364 15,914 Science and engineering 15,942 16,573 18,187 18,996 18,628 18,250 2,229 2,346 3.303 Engineering 2,474 2,520 2,697 3,053 3.342 3,383 12.363 13.018 13 440 13 422 13.876 15,134 9,306 15 654 15.245 14 947 Sciences 8,032 8,035 9,226 8,997 7,453 7,768 Natural sciences 8.191 9.749 Physical science 1 2,678 2,876 2,918 3,402 3,082 2,898 2,834 3,435 3,126 Mathematical science 428 422 518 507 590 657 646 619 396 Computer science 403 451 489 509 543 616 513 513 Biological science 3,300 3,380 3,525 3,568 3,752 4,088 4,234 4.329 Agricultural science 687 620 573 506 616 598 576 549 4,910 5,250 5,408 5,387 5,905 6,019 5,950 Social sciences 5,685 5,828 Social science 2,173 2,737 2,390 2.258 2,401 2,524 2,692 2,721 2,793 2.842 2.992 3.108 Psychology 2.986 3.161 3.136 3.184 3.226 Non-S&E² 10,435 11,239 11,516 12,048 12,135 12,707 13,063 12,878 12,612 White, non-Hispanics Total, all Fields 21,570 22,878 23,185 23,625 24,052 24,594 24,719 24,685 23,813 12,501 13,170 13.323 13.326 13,999 13.717 Science and engineering 13,737 13.889 13,902 Engineering 1,726 1.840 1,837 1,880 2,025 2,020 2,090 2,260 2,267 10,775 11,330 11,486 11,446 11.869 11,739 11.450 11.712 11.812 Sciences 6,488 6,789 6,734 Natural sciences 6,885 6,822 6,836 7,003 6,966 6,786 2,352 473 Physical science 1 2,326 2.502 2,525 2,458 2,366 2,529 2,386 2,337 Mathematical science 369 372 419 476 479 535 478 319 339 355 378 401 356 357 453 Computer science 410 2.904 2.975 3,140 412 3,041 3,068 3.146 3,107 3,119 3,171 570 601 545 493 438 487 473 444 4.287 4,601 Social sciences 4,716 2,215 4.541 4,624 4.876 4,866 4.846 4,953 1,893 Social science 1.834 1.949 1.988 2.069 2,136 2,730 2,119 2,727 2,212 2,741 2,453 2,807 2,501 Psychology 2,648 2,652 2,636 9.069 9.708 10.096 9.862 10.299 10,315 Non-S&E² 10.705 10.817 10.686

See explanatory information and SOURCE at end of table.



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					,			P	age 2 of 4
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Asians				
Total, all Fields	1,268	1,306	1,531	1,764	2,017	3,546	4,309	3,697	3,110
Science and engineering	986	1,009	1,180	1,345	1,610	2,989	3,671	3,091	2.533
Engineering	361	359	405	451	527	867	1,033	895	707
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	625 479 179 24 52	650 486 179 27 48	775 597 189 57 66	894 698 254 52 86	1,083 842 287 79 77	2,122 1,740 689 142 117	2.638 2,203 855 208 137	2,196 1,801 581 140 111	1.826 1.462 475 99 106
Biological scienceAgricultural science	201 23	200 32	261 24	269 37	370 29	720 72	925 78	888 81	719 63
Social sciences Social science Psychology	146 91 55	164 111 53	178 ⁻ 119 59	196 137 59	241 168 73	382 273 109	435 313 122	395 271 124	364 238 126
Non-S&E ²	282	297	351	419	407	557	638	606	577
				Underrepre	esented mind	prities, total			_
Total, all Fields	1,751	1,984	2,165	2,174	2,373	2,452	2.687	2,749	2.824
Science and engineering	802	885	1,012	990	1,054	1,112	1,200	1.295	1,348
Engineering	87	98	121	131	118	126	158	186	210
Sciences Natural sciences Physical science 1 Mathematical science Computer science	715 314 119 19 7	787 329 122 15 6	891 375 129 20 21	859 374 132 18 15	936 418 146 25 14	986 475 157 26 18	1,042 470 141 22 17	1,109 501 157 19 32	1,138 524 154 26 22
Biological science	135 34	144 42	169 36	177 32	196 37	226 48	250 40	250 43	266 56
Social sciences Social science Psychology	401 200 201	458 215 243	516 251 265	485 231 254	518 253 265	511 242 269	572 262 310	608 263 345	614 272 342
Non-S&E ²	949	1.099	1.153	1.184	1,319	1,340	1,487	1,454	1,476
				Blac	k, non-Hispa	inics			
Total, all Fields	963	1,050	1,166	1,116	1,280	1,279	1,477	1,457	1,475
Science and engineering	367	374	464	408	469	500	560	576	616
Engineering	33	40	55	49	50	54	71	74	97
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	334 115 35 8 1	334 104 33 4	409 135 35 11 8	359 116 31 4 5	150 45 8	446 174 52 11 10	489 187 46 5	502 207 64 8 12	519 207 60 7 4
Biological science Agricultural science	57 14	51 15	64 17	62 14		79 22	108 17	98 25	111 25
Social sciences Social science Psychology	219 122 97	230 115 115	274 144 130	243 137 106	150	272 148 124	302 151 151	295 141 154	157
Non-S&E ²	596	676	702	708	811	779	917	881	859

See explanatory information and SOURCE at end of table.



Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
, rolu	1995	1000		1002	Hispanics	1554		1550	
Total, all Fields	694	837	867	909	973	1.030	1,061	1,105	1,183
Science and engineering	382	468	492	513	542	548	571	623	653
	47	54	60	71	66	66	77	98	97
Engineering	335	414	432	442	476	482	494	525	556
SciencesNatural sciences	172	212	212	228	249	274	255	255	290
Physical science 1	68 11	85 10	81 9	88 12	92 16	98 13	86 15	85 10	83 18
Computer science	4	5	12	8	7	7	6	16	17
Biological science	71 18	89 23	95 15	102 18	114 20	131 25	127 21	131 13	146 26
Social sciences	163 70	202 93	220 98	214 81	227 96	208 75	239 94	270 97	266 97
Psychology	93	109	122	133	131	133	145	173	169
Non-S&E ²	312	369	375	396	431	482	490	482	530
				American Inc	dians or Alas	skan Natives			
Total, all Fields	94	97	132	149	120	143	149	187	166
Science and engineering	53	43	56	69	43	64	69	96	79
Engineering	7	4	6	11	2	6	10	14	16
Sciences Natural sciences	46 27	39 13	50 28	58 30	41 19	58 27	59 28	82 39	63 27
Physical science 1	16 0	4	13	13	9	7 2	9	8	11
Computer science	2	o'	1	2		1	ő	4	i
Biological scienceAgricultural science	7 2	4 4	10 4	13 0	7	16 1	15 2	21 5	9 5
Social sciences	19	26	22	28		31	31	43	36
Social science Psychology	8 11	7 19	9 13	13 15	7 15	19 12	17 14	25 18	18 18
Non-S&E ²	41	54	76	80	77	79	80	91	87
		·	J.S. citizens	and permar	l nent resident	s. unknown	race/ethnicit		
Total, all Fields	438	435	549	427	266	302	344	375	1,115
Science and engineering	303	300	399	281	172	197	223	243	652
Engineering	55	49	111	58	27	40	61	42	119
Sciences Natural sciences	248 172	251 164	288 175	223 141			162 110	201 138	533 277
Physical science ¹ Mathematical science	54 16	73 8	75 22	54 12	35	27	53	51 9	10 ⁻
Computer science	18	10	22	10			9	14	21
Biological science	60 24	61 12	54 15	54 11			35 7	56 8	109 18
Social sciences	76	87	113	82			52	63	250 11
Social science Psychology	48 28	39 48	71 42	45 37			27 25	47 16	
Non-S&E ²	135	135	150	146	94	105	121	132	46

See explanatory information and SOURCE at end of table.

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				-				Pa	ige 4 of 4
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
			1.	Nor	resident alie	ens ⁴			
Total, all Fields	6.648	8.093	9,311	9.953	9,932	9,406	8,810	9.610	8.478
Science and engineering	5,391	6.571	7,641	8,092	8,113	7,521	6,994	7,802	6.963
Engineering	1,940	2,277	2.633	2,743	2,784	2,653	2,524	2,716	2,391
Sciences	3,451 2,499 1,012 346 178	4,294 3,232 1,244 424 271	5,008 3,782 1,442 506 340	5.349 4,089 1,582 511 365	5,329 4,056 1,498 517 348	4,868 3,606 1,304 448 343	4,470 3.248 1,103 382 365	5,086 3,843 1,344 441 376	4.572 3,530 1,228 416 315
Biological scienceAgricultural science	608 355	853 440	1,059 435	1,159 472	1,246 447	1,058 453	969 429	1,240 442	1,219 352
Social sciences Social science Psychology	952 846 106	1,062 945 117	1,226 1,093 133	1,260 1,104 156	1,273 1,125 148	1,262 1,111 151	1,222 1,058 164	1,243 1,062 181	1,042 914 128
Non-S&E ²	-1,257	1,522	1,670	1,861	1,819	1,885	1,816	1,808	1,515
				Citiz	enship unkn	Own			
Total, all Fields	2,652	1,371	793	947	1,161	734	874	1,298	3.215
Science and engineering	1,749	933	468	641	757	497	545	799	1,967
Engineering	374	271	107	175	217	116	142	206	404
Sciences Natural sciences Physical science Mathematical science Computer science	1,375 705 294 85 38	662 361 142 46 31	361 189 81 15	466 240 95 40 15	540 309 138 39 23	381 191 95 13	403 223 83 37 16	593 365 161 35 32	1,563 895 327 90 77
Biological science	208 80	95 47	66 18	72 18	94 15	57 9	78 9	118 19	324 71
Social sciences	670 305 365	301 129 172	172 73 99	.226 105 121	231 120 111	190 98 92	180 99 81	228 144 84	66 33 33
Non-S&E ²	903	438	325	306	404	237	329	499	1,24

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTE: See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from NSF/SRS, Survey of Earned Doctorates

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Non-S&E refers to non-science and non-engineering.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

⁴ Nonresident aliens include foreign citizens on temporary visas only.

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
		1			Total		1550		
Total, all Fields	21,814	22.961	23,661	24.454		25.845	25 222	95.400	
	J	ŀ		24,454	24,679	25.215	25,329	25,469	25.304
Science and engineering	15,623	16,498	17,091	17,595	17,791	18,285	18,247	18.583	18.259
Engineering	4,168	4.479	4,747	4,932	5,176	5,187	5,312	5.529	5,351
Sciences Natural sciences	11,455 7,858	12,019 8,430	12,344 8,847	12,663 9,017	12,615 8,936	13,098 9,362	12,935 9,275	13,054 9,353	12,908 9,202
Physical science 1	3.217	3,460	3,583	3,617	3,530	3.790	3,573	3,617	3.578
Mathematical science	704 504	734 595	840 683	853 749	882	882	925	891	862
				/49	742	766	811	782	756
Biological science	2,574 859	2.713 928	2,877 864	2,968 830	3,042 740	3,095 829	3,158 808	3,308 755	3,286 720
Social sciences	3,597	3.589	3,497	3.646	3,679	3,736	3,660	3,701	3,706
Social science Psychology	2,189 1,408	2,221 1,368	2.243 1,254	2.311	2,347	2,458	2.411	2.538	2.509
,	ŀ			1,335	1,332	1,278	1,249	1,163	1,197
Non-S&E ²	6,191	6,463	6,570	6.859	6,888	6.930	7.082	6.886	7,045
	 ,		U.S.	citizens and	d permanent	residents, t	otal 3		
Total, all Fields	14,535	15.355	15,612	15,812	15.988	17,372	17,876	17,183	16,776
Science and engineering	9,671	10,182	10,317	10,365	10,549	11,693	12.083	11,668	11,312
Engineering	1,954	2.070	2,158	2,192	2,349	2,605	2.822	2,860	2,794
Sciences	7,717	8,112	8,159	8,173	8,200	9.088	9,261	8.808	8.518
Natural sciencesPhysical science 1	5.271 2,121	5,526 2,288	5.688 2.307	5,586 2,237	5,559	6,389	6.576	6,134	5.91
Mathematical science	327	329	406	390	2,193 426	2,633 506	2.583 588	2,386 501	2,33 44
Computer science	312	313	357	406	400	449	473	422	41
Biological science	2,024 487	2,068 528	2,135 483	2,130	2,168	2,345	2,469	2,424	2,32
Agricultural science		l		423	372	456	463	401	39
Social sciences	2,446 1,272	2,586 1,366	2,471 1,343	2,587 1,381	2,641 1,418	2.699 1,530	2,685 1,557	2,674 1,631	2,60 1,58
Psychology	1,174	1,220	1,128	1,206	1,223	1,169	1,128	1,043	1,01
Non-S&E ²	4,864	5,173	5.295	5,447	5,439	5,679	5,793	5.515	5,46
				White		ınics		l	
Total, all Fields	12,428	13,160	13,153	13,279	13,348	13,558	13,534	13,228	12,91
Science and engineering	8,213	8,648	8,584	8,623	8,725	8,731	8.680	8,646	8.49
Engineering	1,502	1,614	1,602	1,640	1,764	1,715	1,770	1,913	1,93
Sciences	6,711	7,034	6,982	6,983	6,961	7,016	6,910	6,733	6,55
Natural sciences	4,580	4,836	4,910	4,779	4,705	4,810	4,730	4,542	4,49
Physical science 1	1,842 281	2,008 293	2,000 335	1,927 332	1,868 352	1,998 361	1,831 409	1,797 373	1,81 34
Computer science	252	259	282	309	327	326	349	295	29
Biological science	1,784 421	1,821 455	1,871 422	1,847 364	1,835 323	1,758 367	1,772 369	1,770 307	1,75 29
Social sciences	2,131	2,198	2,072	2,204	2,256	2,206	2.180	2,191	2,06
Social science	1,066	1,123	1,081	1,126	1,160	1,177	1,198	1,286	1,23
Psychology	1,065	1,075	991	1.078	1,096	1,029	982	905	82
Non-S&E ²	4,215	4,512	4,569	4,656	4,623	4,827	4,854	4,582	4,41

See explanatory information and SOURCE at end of table.



 46

								Pa	ge 2 of 4
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
		•	•		Asians				
Total, all Fields	905	909	972	1,136	1,287	2,469	2,869	2,398	1,884
Science and engineering	745	757	806	927	1,079	2,169	2.557	2,108	1.640
Engineering	327	326	356	390	466	748	863	762	589
Sciences Natural sciences Physical science Mathematical science Computer science	418 331 139 21 42	431 336 136 20 41	450 373 135 39 51	537 434 166 33 74	613 501 182 43 58	1,421 1,214 494 116 101	1,694 1,458 616 158 107	1,346 1,154 424 104 95	1,051 888 322 71 80
Biological scienceAgricultural science	112 17	113 26	132 16	136 25	198 20	451 52	515 62	480 51	370 45
Social sciences Social science Psychology	87 59 28	95 73 22	77 62 15	103 83 20	112 90 22	207 175 32	236 192 44	192 161 31	163 131 32
Non-S&E ²	160	152	166	209	208	300	312	290	244 ———
				Underrepre	sented mind	orities, total			
Total, all Fields	878	980	1,084	1,083	1,156	1,142	1,236	1,307	1,326
Science and engineering	474	540	613	588	606	642	673	736	759
Engineering	74	83	101	107	95	105	132	151	161
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	400 218 88 12 2	457 220 82 10 5	512 261 107 12 16	481 253 97 14 13	511 275 112 22 8	537 298 119 20 15	541 302 93 16 9	585 331 123 17 20	598 340 122 18 18
Biological science	87 29	88 35	94 32	105 24	105 28	114 30	155 29	135 36	139 43
Social sciences	182 113 69	237 136 101	251 150 101	228 139 89	236 141 95	239 145 94	239 146 93	254 153 101	258 149 109
Non-S&E ²	404	440 ———	471	495	550	500	563	571	
•				Blac	k, non-Hisp	anics			
Total, all Fields	453	479	552	519	579	553	615	641	632
Science and engineering	214	225	270	238	261	284	290	323	327
Engineering	30	34	47	43	39	41	56	55	74
Sciences Natural sciences Physical science 1 Mathematical science Computer science	27 5	191 71 24 3	88 29 7	80	99 35 7	104 38 8		268 147 49 6 9	253 126 48 5
Biological science		29 14						58 25	51 19
Social sciences		120 77 43	91	87	' 79	93	80	82	127 86 41
Non-S&E ²	239	254	282	281	318	269	325	318	305

See explanatory information and SOURCE at end of table.

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								P	age 3 of 4
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
		_			Hispanics				
Total, all Fields	376	449	458	482	517	518	539	564	617
Science and engineering	227	290	306	308	320	318	339	351	388
Engineering	39	45	50	56	54	60	66	84	74
Sciences Natural sciences Physical science Mathematical science Computer science	188 120 47 7 1	245 138 55 6 4	256 152 68 5 11	252 151 62 9 7	266 162 70 14 6	258 174 75 10 7	273 168 59 11 2	267 160 67 10 9	314 193 64 12 15
Biological science	50 15	56 17	56 12	59 14	57 15	69 13	80 16	65 9	83 19
Social sciences	68 38 30	107 55 52	104 52 52	101 46 55	104 59 45	84 41 43	105 57 48	107 54 53	121 59 62
Non-S&E ²	149	159	152	174	197	200	200	213	229
				American Inc	dians or Alas	skan Natives	· · · · · · · · · · · · · · · · · · ·		
Total, all Fields	49	52	74	82	60	71	82	102	77
Science and engineering	33	25	37	42	25	40	44	62	44
Engineering	5	4	4	8	2	4	10	12	13
Sciences Natural sciences Physical science 1 Mathematical science Computer science	28 20 14 0 1	21 11 3 1 0	33 21 10 0 1	34 22 11 1 2		36 20 6 2 0	34 19 6 1	50 24 7 1 2	31 21 10 1 0
Biological science	4	3 4	6 4	8	5 1	· 11	10 2	12 2	5 5
Social sciences	8 5 3	10 4 6	12 7 5	12 6 6	9 3 6	16 11 5	15 9 6	26 17 9	10 4 6
Non-S&E ²	16	27	37	40	35	31	38	40	33
		U	J.S. citizens	and perman	ent resident	s, unknown	race/ethnicit	у	
Total, all Fields	324	306	403	314	197	203	237	250	655
Science and engineering	239	237	314	227	. 139	151	173	178	417
Engineering	51	47	99	55	24	37	57	34	107
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	188 142 52 13 16	190 134 62 6 8	215 144 65 20 8	172 120 47 11 10	78 31 9	114 67 22 9 7	116 86 43 5 8	144 107 42 7 12	310 195 77 16 24
Biological science Agricultural science	41 20	46 12	38 13	42 10		22 7	27 3	39 7	66 12
Social sciences Social science Psychology	46 34 12	56 34 22	71 50 21	52 33 19	27	47 33 14	30 21 9	37 31 6	115 69 46
Non-S&E ²	85	69 	89	87	58	52	64	72	238

See explanatory information and SOURCE at end of table.

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Table 11. Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of male recipients: 1989-97

						_		Pa	ge 4 of 4
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
				Nor	resident alie	ns ⁴			
Total, all Fields	5,444	6,632	7,517	7,963	7,863	7,330	6,858	7,395	6,463
Science and engineering	4,609	5,590	6,412	6,741	6,658	6,201	5,748	6,305	5,565
Engineering	1,850	2,157	2,484	2,574	2,623	2,475	2,365	2,488	2,194
Sciences Natural sciences Physical science Mathematical science Computer science	2,759 2,011 852 299 160	3,433 2.608 1,048 363 256	3,928 3,003 1,206 420 317	4,167 3,230 1,296 427 329	4,035 3,127 1,217 422 322	3.726 2.802 1,066 364 302	3,383 2,522 921 304 322	3.817 2,931 1,099 358 335	3,371 2.638 995 345 279
Biological science	400 300	582 359	694 366	787 391	809 357	704 366	635 340	799 340	748 271
Social sciences	748 688 60	825 763 62	925 848 77	937 856 81	908 844 64	924 853 71	861 782 79	886 799 87	733 678 55
Non-S&E ²	835	1,042	1,105	1,222	1,205	1,129	1,110	1,090	898
				Citiz	enship unkn	own			
Total, all Fields	1,835	974	532	679	828	513	595	891	2,065
Science and engineering	1,343	726	362	489	584	391	416	610	1,382
Engineering	364	252	105	166	204	107	125	181	363
Sciences Natural sciences Physical science Mathematical science Computer science	78	124 42	257 156 70 14 9	323 201 84 36 14	250 120 34	284 171 91 12 15	291 177 69 33 16	429 288 132 32 25	1,019 648 246 70 63
Biological scienceAgricultural science	150 72		48 15	51 16		46 7	54 5	85 14	213 56
Social sciences Social science Psychology	. 229	92	52	74	85	75		108	371 244 127
Non-S&E ²		248	170	190	244	122	179	281	683

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTE: See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from NSF/SRS, Survey of Earned Doctorates

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Non-S&E refers to non-science and non-engineering.

³ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

⁴ Nonresident aliens include foreign citizens on temporary visas only.

	Page 1 o									
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997	
					Total					
Total, all Fields	12,513	13,106	13,873	14,436	15,122	15,819	16,414	16,945	17,251	
Science and engineering	6,109	6,370	6,932	7,080	7,652	7,920	8,288	8,646	8,921	
Engineering	375	415	467	506	522	635	696	776	747	
Sciences Natural sciences Physical science Mathematical science Computer science	5,734 2,799 767 155 108	5,955 2,931 802 158 110	6,465 3,156 858 199 117	6,574 3,347 958 205 120	7.130 3,620 940 264 138	7.285 3,741 1,011 236 137	7,592 3,945 1,048 265 186	7,870 4,081 1,014 231 139	8,174 4,220 1,059 263 149	
Biological scienceAgricultural science	1,542 227	1,615 246	1.773 209	1,831 233	2,050 228	2,108 249	2,218 228	2.415 282	2,491 258	
Social sciences	2.935 1,135 1,800	3,024 1,111 1,913	3.309 1,313 1,996	3,227 1,299 1,928	3.510 1,422 2,088	3,544 1.443 2.101	3,647 1,467 2,180	3,789 1,461 2,328	3,954 1,585 2.369	
Non-S&E ²	6,404	6,736	6,941	7,356	7,470	7,899	8,126	8.299	8.330	
			U.S	citizens an	d permanen	residents, t	otal ³			
Total, all Fields	10,492	11,248	11,818	12,178	12,720	13,522	14,183	14,323	14,086	
Science and engineering	4,921	5,182	5.597	5,577	6,024	6,494	6,913	6.960	6,938	
Engineering	275	276	316	328	348	448	520	523	509	
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	4,646 2,182 557 101 84	4,906 2,242 588 93 90	5,281 2,344 611 112 94	5,249 2,449 661 117 83	5,676 2,632 641 164 109	6,046 2,917 769 151 94	6,393 3,173 852 183 143	6,437 3,092 740 145 91	6,429 3,081 745 172 99	
Biological science Agricultural science	1.276 164	1,312 159	1,390 137	1,438 150	1,584 134	1,743 160	1,860 135	1,941 175	1,909 156	
Social sciences Social science Psychology	2,464 901 1,563	2,664 892 1,772	2,937 1,047 1,890	2,800 1,020 1,780	3,044 1,106 1,938	3.129 1.162 1,967	3,220 1,164 2,056	3,345 1,162 2,183	3,348 1,255 2,093	
Non-S&E ²	5,571	6,066	6,221	6,601	6,696	7,028	7,270	7,363	7,148	
				Whit	e, non-Hispa	anics				
Total, all Fields	9,142	9,718	10,032	10,346	10,704	11,036	11,185	11,457	10,902	
Science and engineering	4,288	4,522	4,739	4,703	5,012	5,158	5,222	5,353	5,221	
Engineering	224	226	235	240	261	305	320	347	330	
Sciences Natural sciences Physical science Mathematical science Computer science	4,064 1,908 484 88 67	4,296 1,953 494 79 80	4,504 1,975 525 84 73	4,463 2,043 531 93 69	4,751 2,131 498 124 83	4,853 2,193 531, 118 75	4,902 2,236 555 126 104	5,006 2,244 540 105 61	4,891 2,241 536 131 65	
Biological science	1,120 149	1,154 146	1,170 123	1,221 129	1,311 115	1,349 120	1,347 104	1,401 137	1,390 119	
Social sciences Social science Psychology	2,156 768 1,388	2,343 770 1,573	2,529 868 1,661	2,420 862 1,558	2,620 909 1,711	2,660 959 1,701	2,666 921 1,745	2,762 926 1,836	2,650 977 1,673	
Non-S&E ²	4,854	5,196	5,293	5,643	5,692	5,878	5,963	6,104	5,681	

See explanatory information and SOURCE at end of table.



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	1000	4000	4004	1002	4002	1994	1995	1996	1997
Field	1989	1990	1991	1992	1993 Asians	1994	1995	1330	
.}			ī	1	Asialis				
Total, all Fields	363	397	559	628	730	1,077	1,440	1,299	1,226
Science and engineering	241	252	374	418	531	820	1,114	983	893
Engineering	34	33	49	61	61	119	170	133	118
SciencesNatural sciences	207 148 40	219 150 43	325 224 54	357 264 88	470 341 105	701 526 195	944 745 239	850 647 157	775 574 153
Physical science 1	3 10	7 7	18 15	19 12	36 19	26 16	50 30	36 16	28 26
Biological science Agricultural science	89 6	87 6	129 8	133 12	172 9	269 20	410 16	408 30	349 18
Social sciencesSocial science	59 32	69 38	101 57	93 54	129 78	175 98	199 121	203 110	201 107
Psychology	27	31	44	39	51	77	78	93	94
Non-S&E ²	122	145	185	210	199	257	326	316	333
				Underrepre	esented mind	orities, total			
Total, all Fields	873	1,004	1,081	1,091	1,217	1,310	1,451	1,442	1,498
Science and engineering	328	345	399	402	448	470	527	559	589
Engineering	13	15	20	24	23	21	26	35	49
Sciences Natural sciences	315 96	330 109	379 114	378 121	425 143	449 177	501 168	524 170	540 184
Physical science 1	31 7	40 5	22 8	35 4	34	38 6	48 6	34 2	32 8
Computer science	5	1	5	2	l .	3	8	12	4
Biological science	48 5	56 7	75 4	72 8		112 18	95 11	115 7	127 13
Social sciences	219 87	221 79	265 101	257 92	282 112	272 97	333 116	354 110	356 123
Psychology	132	142	164	165		175	217	244	233
Non-S&E ²	545	659	682	689	769	840	924	883	909
				Blad	ck, non-Hisp	anics			
Total, all Fields	510	571	614	597	701	726	862	816	843
Science and engineering	153	149	194	170	208	216	270	253	289
Engineering	3	6	8	6	11	13	15	19	23
Sciences Natural sciences	150 37	143 33					255 72	234 60	266 81
Physical science Mathematical science Computer science	8 3	9 1 0	1 4	7	10] 3	1	15 2 3	
Biological science	24	22		24	32		43		
Social sciences		110	139	· '	146				
Social science	52 61							115	
Non-S&E ²	357	422	420	427	493	510	592	563	554

See explanatory information and SOURCE at end of table.



	, 			<u> </u>					Page 3 of 4
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Hispanics				
Total, all Fields	318	388	409	427	456	512	522	541	566
Science and engineering	155	178	186	205	222	230	232	272	265
Engineering	8	9	10	15	12	6	11	14	23
Sciences Natural sciences		169	176	190	210	224	221	258	242
Physical science 1	21	74 30	60 13	77 26	87 22	100	87 27	95 18	97 19
Mathematical science		4 1	4	3	2	3 0	4 4	0 7	6 2
Biological science		33 6	39 3	43 4	57 5	62 12	47 5	66 4	63 7
Social sciencesSocial science		95 38	116 46	113		124	134	163	145
Psychology	63	57	70	35 78	37 86	34 90	37 97	43 120	38 107
Non-S&E ²	163	210	223	222	234	282	290	269	301
				American In	dians or Ala	skan Natives	;		
Total, all Fields	45	45	58	67	60	72	67	85	89
Science and engineering	20	18	19	27	18	24	25	34	35
Engineering	2	o	2	3	o	2.	0	2	3
Sciences Natural sciences	18	18 2	17 7	24	18	22	25	32	32
Physical science 1 Mathematical science	2	1 0	3	8 2	5 2	7	9	15 1	6
Computer science	۱	ŏ	0	1 0	0 1	0	1 0	.0 2	0
Biological science	3 1	1 0	4 0	5 0	2 0	5 0	5 0	9 3	4 0
Social sciences	11	16 3	10 2	16 7	13 4	15 8	16 8	17	26 14
Psychology	8	13	8.	9	9	7	8	8 9	12
Non-S&E ²	25	27	39	40	. 42	48	42	51	54
		U	.S. citizens	and perman	ent resident	s, unknown	race/ethnici	у	
Total, all Fields	114	129	146	113	69	99	107	125	460
Science and engineering	64	63	85	54	33	46	50	65	235
Engineering	4	2	12	3	3	3	4	8	12
Sciences	60 30	61 30	73 31	51 21	30	43 21	46	57	223
Physical science 1	2	11	10	7	17 4	5	24 10	31 9	82 24
Computer science	2	2	1	1 0	1	1 0	1	2 2	5 4
Biological science	19	15 0	16 2	12 1	10 1	13 2	8 4	17 1	43 6
Social sciencesSocial science	30 14	31 5	42 21	30 12	13	22	22	26 16	141
Psychology	16	26	21	18	6	8 14	6 16	16 10	48 93
Non-S&E ²	50	66	61	59	36	53	57	60	225

See explanatory information and SOURCE at end of table.



	_							Pa	ige 4 of 4
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
		•	· · ·	Nor	resident alie	ıns ⁴			
Total, all Fields	1,204	1,461	1,794	1,990	2,069	2,076	1,952	2,215	2,015
Science and engineering	782	981	1,229	1,351	1,455	1,320	1,246	1,497	1,398
Engineering	90	120	149	169	161	178	159	228	197
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	692 488 160 47 18	861 624 196 61 15	1,080 779 236 86 23	1,182 859 286 84 36	1,294 929 281 95 26	1,142 804 238 84 41	1,087 726 182 78 43	1,269 912 245 83 41	1,201 892 233 71 36
Biological scienceAgricultural science	208 55	271 81	365 69	372 81	437 90	354 87	334 89	441 102	471 81
Social sciences Social science Psychology	204 158 46	237 182 55	301 245 56	323 248 75	365 281 84	338 258 80	361 276 85	357 263 94	309 236 73
Non-S&E ²	422	480	565	639	614	756	706	718	617
				Citiz	enship unkn	own			
Total, all Fields	817	397	261	268	333	221	279	407	1,150
Science and engineering	406	207	106	152	173	106	129	189	585
Engineering	10	19	2	9	13	9	17	25	41
Sciences	396 129 50 7 6	188 65 18 4 5	104 33 11 1 0	143 39 11 4	59 18 5	97 20 4 1 2	112 46 14 4 0	164 77 29 3 7	544 247 81 20 14
Biological scienceAgricultural science	58 8	32 6	18 3	21		11 2	24 4	33 5	111 21
Social sciences Social science Psychology	267 76 191	123 37 86	71 21 50	104 31 73	35	77 23 54	66 27 39	87 36 51	297 94 203
Non-S&E ²	411	190	155	116	160	115	150	218	565

¹ In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTE: See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from NSF/SRS, Survey of Earned Doctorates

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Non-S&E refers to non-science and non-engineering.

³ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident allens who have been admitted for permanent residency).

⁴ Nonresident aliens include foreign citizens on temporary visas only.

Table 13. Number and percent of bachelor's degrees earned by blacks which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
				Total,	all black rec	ipients			
Total, all Fields	56,837	59,301	65,009	71,311	76,667	82,316	85,287	89,554	92,067
Science and engineering	17,385	18,230	19,987	22,431	24,421	26,289	27,528	29,055	30,444
Engineering	2,067	2,072	2,229	2,362	2,577	2,659	2,845	3,000	3,076
Sciences	15,318	16,158	17,758	20,069	21,844	23,630	24,683	26,055	27,368
Natural sciencesPhysical science ¹	6,005 697	5,782 650	5,834 753	6,401 816	6,972 836	7,559 921	8,021 1,034	8,670 1,100	9,061 1,110
Mathematical science	792 2,457	720 2,247	811 1,997	904 2,090	965	992	995	981	1,071
Biological science	1,916	i			2,213	2,398	2,498	2,415	2,370
Agricultural science	143	1,994 171	2,111 162	2,385 206	2,739 219	2,980 268	3,231 263	3,811 363	4,123 387
Social sciences	9,313 6,570	10,376 7,226	11,924 8,236	13,668 9,489	14,872 10,254	16,071 10,835	16,662	17,385	18,307
Psychology	2,743	3,150	3,688	4,179	4,618	5,236	10,921 5,741	11,357 6,028	11,660 6,647
Non-S&E ²	39,452	41,071	45,022	48,880	52,246	56,027	57,759	60,499	61,623
				Black red	cipients from	HBCUs			
Total, all Fields	15,925	16,345	17,963	19,709	21,849	23,426	23,989	25,425	25,215
Science and engineering	5,054	5,190	5,679	6,363	7,368	7,804	8,361	8,980	9,071
Engineering	474	524	589	594	700	690	798	894	905
Sciences	4,580 2,513	4,666 2,353	5,090 2,363	5,769 2,599	6,668 3,021	7,114 3,105	7,563 3,384	8,086	8,166
Physical science ¹	320	296	358	376	390	421	471	3,794 547	3,872 503
Computer science	381 1,048	307 899	369 748	420 780	463 904	449 904	466 967	443 979	478 834
Biological science Agricultural science	693 71	764 87	792 96	906 117	1,155 109	1,197 134	1,357 123	1,628 197	1,841 216
Social sciences	2,067	2,313	2,727	3,170	3,647	4,009	4,179	4,292	4,294
Social science Psychology	1,517 550	1,651 662	1,886 841	2,201 969	2,507 1,140	2,701 1,308	2,747 1,432	2,780 1,512	2,641
Non-S&E ²	10,871	11,155	12,284	13,346	14,481	15,622	15,628		1,653
		- 11,100	12,204	13,340	14,401	15,622	15,020	16,445	16,144
,				Perce	ent from HB	CUs ———			
Total, all Fields	28.0	27.6	27.6	27.6	28.5	28.5	28.1	28.4	27.4
Science and engineering	29.1	28.5	28.4	28.4	30.2	29.7	30.4	30.9	29.8
Engineering	22.9	25.3	26.4	25.1	27.2	25.9	28.0	29.8	29.4
Sciences Natural sciences	29.9	28.9	28.7	28.7	30.5	30.1	30.6	31.0	29.8
Physical science ¹	41.8 45.9	40.7 45.5	40.5 47.5	40.6 46.1	43.3 46.7	41.1 45.7	42.2 45.6	43.8 49.7	42.7 45.3
Mathematical science	48.1	42.6	45.5	46.5	48.0	45.3	46.8	45.2	44.6
	42.7	40.0	37.5	37.3	40.8	37.7	38.7	40.5	35.2
Biological science	36.2 49.7	38,3 50.9	37.5 59.3	38.0 56.8	42.2 49.8	40.2 50.0	42.0 46.8	42.7 54.3	44.7 55.8
Social sciences	22.2	22.3	22.9	23.2	24.5	24.9	25.1	24.7	23.5
Psychology	23.1 20.1	22.8 21.0	22.9 22.8	23.2 23.2	24.4 24.7	24.9 25.0	25.2 24.9	24.5 25.1	22.7 24.9
Non-S&E ²	27.6	27.2	27.3	27.3	27.7	27.9	27.1	27.2	26.2
		·							

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.



Non-S&E refers to non-science and non-engineering.

Table 14. Number and percent of bachelor's degrees earned by black men which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
				Total,	all black reci	pients			
Total, all Fields	21,913	22,590	24,238	26,518	28,374	30,106	30,998	32,223	32,726
Science and engineering	7,685	7,830	8,448	9,375	10,099	10,806	11,127	11,700	11,947
Engineering	1,397	1,416	1,484	1,614	1,764	1,784	1,846	1,964	2,019
Sciences Natural sciences Physical science Mathematical science Computer science	6,288 2,732 365 374 1,205	6,414 2,476 292 342 1,074	6,964 2,538 391 380 971	7,761 2,709 381 374 1,092	8,335 2,872 370 444 1,049	9,022 3,146 464 457 1,161	9,281 3,314 495 476 1,241	9,736 3,591 482 468 1,218	9,928 3,678 466 510 1,212
Biological science	700 88	658 110	696 100	749 113	883 126	927 137	981 121	1,236 187	1,304 186
Social sciences Social science Psychology	3,556 2,911 645	3,938 3,144 794	4,426 3,547 879	5,052 4,070 982	5,463 4,364 1,099	5,876 4,644 1,232	5,967 4,565 1,402	6,145 4,727 1,418	6,250 4,659 1,591
Non-S&E ²	14,228	14,760	15,790	17,143	18,275	19,300	19,871	20,523	20,779
			_	Black red	cipients from	HBCUs			
Total, all Fields	5,982	6,066	6,430	7,087	7,867	8,457	8,587	9,094	8,933
Science and engineering	2,112	2,086	2,211	2,450	2,761	2,940	3,190	3,467	3,425
Engineering	308	331	359	380	430	425	500	544	534
Sciences Natural sciences Physical science Mathematical science Computer science	1,804 1,056 160 179 460	1,755 935 127 134 377	1,852 951 163 164 333	2,070 972 145 150 364		2,515 1,162 197 181 381	2,690 1,260 202 204 411	2,923 1,444 202 206 442	2,891 1,418 162 223 378
Biological science Agricultural science	206 51	231 66	231 60	238 75	317 65	334 69	385 58	482 112	543 112
Social sciences Social science Psychology	748 621 127	820 657 163	901 720 181	1,098 868 230	1,242 989 253	1,353 1,060 293	1,430 1,080 350	1,479 1,119 360	1,473 1,045 428
Non-S&E ²	3,870	3,980	4,219	4,637	5,106	5,517	5,397	5,627	5,508
				Per	cent from HE	BCUs			
Total, all Fields	27.3	26.9	26.5	26.7	27.7	28.1	27.7	28.2	27.3
Science and engineering	27.5	26.6	26.2	26.1	27.3	27.2	28.7	29.6	28.7
Engineering	22.0	23.4	24.2	23.5	24.4	23.8	27.1	27.7	26.4
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	28.7 38.7 43.8 47.9 38.2	27.4 37.8 43.5 39.2 35.1	26.6 37.5 41.7 43.2 34.3	26.7 35.9 38.1 40.1 33.3	37.9 40.5 44.1	36.9 42.5 39.6	42.9	30.0 40.2 41.9 44.0 36.3	29.1 38.6 34.8 43.7 31.2
Biological scienceAgricultural science	29.4 58.0	35.1 60.0	33.2 60.0	31.8 66.4				39.0 59.9	41.6 60.2
Social sciences Social science Psychology	21.0 21.3 19.7	20.8 20.9 20.5	20.4 20.3 20.6		22.7	22.8	23.7	24.1 23.7 25.4	23.6 22.4 26.9
Non-S&E ²	27.2	27.0	26.7	27.0	27.9	28.6	27.2	27.4	26.5

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.



Non-S&E refers to non-science and non-engineering.

Table 15. Number and percent of bachelor's degrees earned by black women which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
				Total, a	all black rec	pients			
Total, all Fields	34,924	36,711	40,771	44,793	48,293	52,210	54,289	57,331	59,341
Science and engineering	9,700	10,400	11,539	13,056	14,322	15,483	16,401	17,355	18,497
Engineering	670	656	745	748	813	875	999	1,036	1,057
Sciences Natural sciences Physical science Mathematical science Computer science	9,030 3,273 332 418 1,252	9,744 3,306 358 378 1,173	10,794 3,296 362 431 1,026	12,308 3,692 435 530 998	13,509 4,100 466 521 1,164	14,608 4,413 457 535 1,237	15,402 4,707 539 519 1,257	16,319 5,079 618 513 1,197	17,440 5,383 644 561 1,158
Biological science	1,216 55	1,336 61	1,415 62	1,636 93	1,856 93	2,053 131	2,250 142	2,575 176	2,819 201
Social sciences Social science Psychology	5,757 3,659 2,098	6,438 4,082 2,356	7,498 4,689 2,809	8,616 5,419 3,197	9,409 5,890 3,519	10,195 6,191 4,004	10,695 6,356 4,339	11,240 6,630 4,610	12,057 7,001 5,056
Non-S&E ²	25,224	26,311	29,232	31,737	33,971	36,727	37,888	39,976	40,844
	Black recipients from HBCUs								
Total, all Fields	9,943	10,279	11,533	12,622	13,982	14,969	15,402	16,331	16,282
Science and engineering	2,942	3,104	3,468	3,913	4,607	4,864	5,171	5,513	5,646
Engineering	166	193	230	214	270	265	298	350	371
Sciences Natural sciences Physical science Mathematical science Computer science	2,776 1,457 160 202 588	2,911 1,418 169 173 522	3,238 1,412 195 205 415	3,699 1,627 231 270 416	4,337 1,932 240 267 543	4,599 1,943 224 268 523	4,873 2,124 269 262 556	5,163 2,350 345 237 537	5,275 2,454 341 255 456
Biological science	487 20	533 21	561 36	668 42	838 44	863 65	972 65	1,146 85	1,298 104
Social sciences Social science Psychology	1,319 896 423	1,493 994 499	1,826 1,166 660	2,072 1,333 739	2,405 1,518 887	2,656 1,641 1,015	2,749 1,667 1,082	2,813 1,661 1,152	2,821 1,596 1,225
Non-S&E ²	7,001	7,175	8,065	8,709	9,375	10,105	10,231	10,818	10,636
				Perce	ent from HB	CUs			
Total, all Fields	28.5	28.0	28.3	28.2	29.0	28.7	28.4	28.5	27.4
Science and engineering	30.3	29.8	30.1	30.0	32.2	31.4	31.5	31.8	30.5
Engineering	24.8	29.4	30.9	28.6	33.2	30.3	29.8	33.8	35.1
Sciences Natural sciences Physical science 1 Mathematical science Computer science	30.7 44.5 48.2 48.3 47.0	29.9 42.9 47.2 45.8 44.5	30.0 42.8 53.9 47.6 40.4	30.1 44.1 53.1 50.9 41.7	32.1 47.1 51.5 51.2 46.6	31.5 44.0 49.0 50.1 42.3	31.6 45.1 49.9 50.5 44.2	31.6 46.3 55.8 46.2 44.9	30.2 45.6 53.0 45.5 39.4
Biological science	40.0 36.4	39.9 34.4	39.6 58.1	40.8 45.2	45.2 47.3	42.0 49.6	43.2 45.8	44.5 48.3	46.0 51.7
Social sciences	22.9 24.5 20.2	23.2 24.4 21.2	24.4 24.9 23.5	24.0 24.6 23.1	25.6 25.8 25.2	26.1 26.5 25.3	25.7 26.2 24.9	25.0 25.1 25.0	23.4 22.8 24.2
Non-S&E 2	27.8	27.3	27.6	27.4	27.6	27.5	27.0	27.1	26.0

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES:

Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE:



Non-S&E refers to non-science and non-engineering.

Table 16. Number and percent of master's degrees earned by blacks which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
				Total, a	all black reci	pients	_1	<u>I</u> _	
Total, all Fields	13,455	14,473	15,857	17,420	18,897	20,936	22,954	24,588	26,948
Science and engineering	1,652	1,847	2,090	2,356	2,554	2,849	3,339	3,518	3,817
Engineering	355	387	398	466	564	589	665	674	674
Sciences Natural sciences Physical science Mathematical science Computer science	1,297 495 78 59 198	1,460 527 87 70 232	1,692 644 73 100 283	1,890 699 98 77 316	1,990 716 105 98 308	2,260 821 127 109 365	2,674 881 147 151 347	2,844 932 116 151 379	3,143 1,010 144 157 377
Biological science	124 36	110 28	137 51	149 59	135 70	142 78	162 74	198 88	236 96
Social sciences	802 407 395	933 462 471	1,048 594 454	1,191 660 531	1,274 730 544	1,439 803 636	1,793 930 863	1,912 965 947	2,133 1,010 1,123
Non-S&E ²	11,803	12,626	13,767	15,064	16,343	18,087	19,615	21,070	23,131
				Black re	cipients from	HBCUs			
Total, all Fields	2,368	2,358	2,518	2,631	2,779	3,205	3,478	3,818	4,218
Science and engineering	314	339	391	426	453	484	582	644	711
Engineering	38	42	37	41	41	43	54	62	64
Sciences	276 143 23 13 42	297 153 24 17 63	354 180 24 21 59	385 188 21 17 76	412 204 36 23 75	441 204 21 21 87	528 260 41 44 94	582 276 38 48 92	647 311 51 45 88
Biological scienceAgricultural science	47 18	37 12	46 30	47 27	38 32	34 41	48 33	60 38	76 51
Social sciences Social science Psychology	133 78 55	144 69 75	174 114 60	197 125 72		237 126 111	268 130 138	306 141 165	336 156 180
Non-S&E ²	2,054	2,019	2,127	2,205	2,326	2,721	2,896	3,174	3,507
		_		Per	cent from HE	BCUs			
Total, all Fields	17.6	16.3	15.9	15.1	14.7	15.3	15.2	15.5	15.7
Science and engineering	19.0	18.4	18.7	18.1	17.7	17.0	17.4	18.3	18.6
Engineering	10.7	10.9	9.3	8.8	7.3	7.3	8.1	9.2	9.5
Sciences Natural sciences Physical science Mathematical science Computer science	28.9 29.5 22.0	20.3 29.0 27.6 24.3 27.2	28.0 32.9 21.0	26.9 21.4 22.1	28.5 34.3 23.5	24.8 16.5 19.3	19.7 29.5 27.9 29.1 27.1	29.6 32.8 31.8	35.4 28.7
Biological science Agricultural science	37.9	33.6 42.9	33.6 58.8				29.6 44.6		
Social sciences Social science Psychology	16.6 19.2	15.4 14.9 15.9	19.2	18.9	14.7	15.7	14.0	14.6	15.4
Non-S&E ²	17.4	16.0	15.4	14.6	14.2	15.0	14.8	15.1	15.2

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be NOTES: adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.



Non-S&E refers to non-science and non-engineering.

Table 17. Number and percent of master's degrees earned by black men which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
			·——	Total,	all black rec	ipients	1		
Total, all Fields	4,964	5,169	5,619	5,794	6,472	7,007	7,636	7,998	8,444
Science and engineering	878	950	1,028	1,166	1,253	1,376	1,534	1,565	1,617
Engineering	262	287	299	332	407	422	464	464	449
Sciences Natural sciences Physical science Mathematical science Computer science	616 290 56 32 119	663 307 61 37 140	729 338 43 53 150	834 382 66 44 175	846 386 58 48 193	954 435 74 62 205	1,070 434 86 64 199	1,101 467 59 78 205	1,168 484 74 77 208
Biological science	59 24	51 18	58 34	61 36	47 40	48 46	50 35	76 49	69 56
Social sciences	326 206 120	356 223 133	391 262 129	452 315 137	460 345 115	519 358 161	636 418 218	634 391 243	684 426 258
Non-S&E ²	4,086	4,219	4,591	4,628	5,219	5,631	6,102	6,433	6,827
				Black re	cipients from	HBCUs			
Total, all Fields	730	746	766	782	822	942	973	1,092	1,164
Science and engineering	154	164	172	195	191	208	230	282	266
Engineering	26	32	29	27	23	28	33	44	37
Sciences Natural sciences Physical science 1 Mathematical science Computer science	128 76 14 8 24	132 84 14 9 35	143 90 14 7 33	168 100 16 7 46	168 106 19 9 44	180 98 10 12 40	197 105 24 20 36	238 135 22 24 45	229 133 21 19 42
Biological science	19 11	17 9	15 21	15 16	11 23	7 29	12 13	22 22	20 31
Social sciences Social science Psychology	52 39 13	48 28 20	53 39 14	68 47 21	62 40 22	82 49 33	92 62 30	103 64 39	96 58 38
Non-S&E ²	576	582	594	587	631	734	743	810	898
				Pero	ent from HE	CUs			
Total, all Fields	14.7	14.4	13.6	13.5	12.7	13.4	12.7	13.7	13.8
Science and engineering	17.5	17.3	16.7	16.7	15.2	15.1	15.0	18.0	16.5
Engineering	9.9	11.1	9.7	8.1	5.7	6.6	7.1	9.5	8.2
Sciences Natural sciences Physical science Mathematical science Computer science	20.8 26.2 25.0 25.0 20.2	19.9 27.4 23.0 24.3 25.0	19.6 26.6 32.6 13.2 22.0	20.1 26.2 24.2 15.9 26.3	19.9 27.5 32.8 18.8 22.8	18.9 22.5 13.5 19.4 19.5	18.4 24.2 27.9 31.3 18.1	21.6 28.9 37.3 30.8 22.0	19.6 27.5 28.4 24.7 20.2
Biological science	32.2 45.8	33.3 50.0	25.9 61.8	24.6 44.4	23.4 57.5	14.6 63.0	24.0 37.1	28.9 44.9	29.0 55.4
Social sciences Social science Psychology	16.0 18.9 10.8	13.5 12.6 15.0	13.6 14.9 10.9	15.0 14.9 15.3	13.5 11.6 19.1	15.8 13.7 20.5	14.5 14.8 13.8	16.2 16.4 16.0	14.0 13.6 14.7
Non-S&E ²	14.1	13.8	12.9	12.7	12.1	13.0	12.2	12.6	13.2

¹ In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.



Non-S&E refers to non-science and non-engineering.

Table 18. Number and percent of master's degrees earned by black women which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

		1			-		T		
Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
				Total,	all black reci	pients			
Total, all Fields	8,491	9,304	10,238	11,626	12,425	13,929	15,318	16,590	18,504
Science and engineering	774	897	1,062	1,190	1,301	1,473	1,805	1,953	2,200
Engineering	93	100	99	134	157	167	201	210	225
Sciences Natural sciences Physical science Mathematical science Computer science	681 205 22 27 79	797 220 26 33 92	963 306 30 47 133	1,056 317 32 33 141	1,144 330 47 50 115	1,306 386 53 47 160	1,604 447 61 87 148	1,743 465 57 73 174	1,975 526 70 80 169
Biological science Agricultural science	65 12	59 10	79 17	88 23	88 30	94 32	112 39	122 39	167 40
Social sciences	476 201 275	577 239 338	657 332 325	739 345 394		920 445 475	1,157 512 645	1,278 574 704	1,449 584 865
Non-S&E ²	7,717	8,407	9,176	10,436	11,124	12,456	13,513	14,637	16,304
				Black re	cipients from	HBCUs	_		
Total, all Fields	1,638	1,612	1,752	1,849	1,957	2,263	2,505	2,726	3,054
Science and engineering	160	175	219	231	262	276	352	362	445
Engineering	12	10	8	14	18	15	21	18	27
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	148 67 9 5 18	165 69 10 8 28	211 90 10 14 26	217 88 5 10 30	98 17 14	261 106 11 9 47	331 155 17 24 58	344 141 16 24 47	418 178 30 26 46
Biological scienceAgricultural science	28 7	20 3	31 9	32 11		27 12	36 20	38 16	56 20
Social sciences	39	96 41 55 1,437	121 75 46 1,533	129 78 51 1,618	67 79	77 78	176 68 108 2,153	203 77 126 2,364	240 98 142 2,609
Nonocc				L .	cent from HI	1 3CUs			
						1		1	
Total, all Fields	19.3	17.3	17.1	15.9	15.8	16.2	16.4	16.4	16.5
Science and engineering	20:7	19.5	20.6	19.4	20.1	1	19.5		20.2
Engineering	12.9	10.0	8.1		ł	1	10.4		
Sciences	32.7 40.9 18.5	20.7 31.4 38.5 24.2 30.4	29.4 33.3 29.8	27.8 15.0 30.3	36.2 3 28.0	27.5 20.8 19.1	34.7 27.9 27.6	30.3 28.1 32.9	33.8 42.9 32.5
Biological science	43.1	33.9 30.0							
Social sciences Social science Psychology	. 19.4	16.6 17.2 16.3	22.6	22.	6 17.4	17.3	13.3	13.4	16.8
Non-S&E ²	19.2	17.1	16.7	15.	5 15.2	16.0	15.9	16.2	16.0

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.



Non-S&E refers to non-science and non-engineering.

Table 19. Number and percent of doctoral degrees earned by blacks which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
				Total,	all black reci	pients			
Total, all Fields	963	1,050	1,166	1,116	1,280	1,279	1,477	1,457	1,475
Science and engineering	367	374	464	408	469	500	560	576	616
Engineering	33	40	55	49	50	54	71	74	97
Sciences Natural sciences Physical science Mathematical science Computer science	334 115 35 8 1	334 104 33 4 1	409 135 35 11 8	359 116 31 4 5	419 150 45 8 6	446 174 52 11 10	489 187 46 5	502 207 64 8 12	519 207 60 7 4
Biological science	57 14	51 15	64 17	62 14	75 16	79 22	108 17	98 25	111 25
Social sciences	219 122 97	230 115 115	274 144 130	243 137 106	269 150 119	272 148 124	302 151 151	295 141 154	312 157 155
Non-S&E ²	596	676	702	708	811	779	917	881	859
				Black red	cipients from	HBCUs			
Total, all Fields	87	141	112	104	135	134	138	142	115
Science and engineering	35	36	53	43	60	52	59	66	61
Engineering	1	0	3	2	0	4	1	4	1
Sciences Natural sciences Physical science Mathematical science Computer science	34 16 3 3	36 15 4 0 0	50 21 6 0 0	41 12 0 0 0	60 26 6 0	48 17 3 2 0	58 29 10 0 0	62 25 4 0 1	60 32 8 2 0
Biological science	10 0	11 0	15 0	12 0	19 1	12 0	18 1	18 2	19 3
Social sciences Social science Psychology	18 12 6	21 13 8	29 10 19	29 19 10	34 22 12	31 11 20	29 11 18	37 25 12	28 15 13
Non-S&E ²	52	105	59	61	75	82	79	76	54
				Perd	ent from HB	CUs	_		
Total, all Fields	9.0	13.4	9.6	9.3	10.5	10.5	9.3	9.7	7.8
Science and engineering	9.5	9.6	11.4	10.5	12.8	10.4	10.5	11.5	9.9
Engineering	3.0	.0	5.5	4.1	.0	7.4	1.4	5.4	1.0
Sciences Natural sciences Physical science Mathematical science Computer science	10.2 13.9 8.6 37.5	10.8 14.4 12.1 .0 .0	12.2 15.6 17.1 .0	11.4 10.3 .0 .0	.0	10.8 9.8 5.8 18.2	11.9 15.5 21.7 .0	12.4 12.1 6.3 .0 8.3	11.6 15.5 13.3 28,6
Biological science	17.5 .0	21.6 .0	23.4 .0	19.4 .0	25.3 6.3	15.2 .0	16.7 5.9	18.4 8.0	17.1 12.0
Social sciences	8.2 9.8 6.2	9.1 11.3 7.0	10.6 6.9 14.6	11.9 13.9 9.4	14.7	11.4 7.4 16.1	9.6 7.3 11.9	12.5 17.7 7.8	9.0 9.6 8.4
Non-S&E ² ·	8.7	15.5	8.4	8.6	9.2	10.5	8.6	8.6	6.3

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies data from NSF/SRS, Survey of Earned Doctorates



Non-S&E refers to non-science and non-engineering.

Table 20. Number and percent of doctoral degrees earned by black men which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

	1989	1990	1991	1992	1993	1994	1995	1996	1997
		1		Total,	all black reci	pients		i	
}	1	1	1					1	
Total, all Fields	453	479	552	519	579	553	615	641	632
Science and engineering	214	225	270	238	261	284	290	323	327
Engineering	30	34	47	43	39	41	56	55	74
Sciences	184 78 27 5 0	191 71 24 3 1	223 88 29 7 4	195 80 24 4 4	222 99 35 7 2	243 104 38 8 8	234 115 28 4 7	268 147 49 6 9	253 126 48 5 3
Biological science Agricultural science	33 13	29 14	32 16	38 10	43 12	34 16	65 11	58 25	51 19
Social sciences	106 70 36	120 77 43	135 91 44	115 87 28	123 79 44	139 93 46	119 80 39	121 82 39	127 86 41
Non-S&E ²	239	254	282	281	318	269	325	318	305
				Black re	cipients from	HBCUs			
Total, all Fields	41	61	58	48	56	55	57	68	52
Science and engineering	21	22	32	23	30	28	32	40	33
Engineering	1	0	3	2	o	3	1	3	1
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	20 10 2 2 0	22 7 2 0 0	29 15 5 0 0	21 5 0 0	30 15 5 0	25 7 2 1 0	31 17 6 0 0	37 1 17 4 0 0	32 16 8 0 0
Biological science	6	5 0	10 0	5 0	9	4 0	10 1	· 11	7 1
Social sciences	10 9 1	15 11 4	14 8 6	16 14 2	15 12 3	18 10 8	14 8 6	20 16 4	16 11 5
Non-S&E ²	20	39	26	25	26	27	25	28	19
				Per	cent from HE	CUs			
Total, all Fields	9.1	12.7	10.5	9.2	9.7	9.9	9.3	10.6	8.2
Science and engineering	9.8	9.8	11.9	9.7	11.5	9.9	11.0	12.4	10.1
Engineering	3.3	.0	6.4	4.7	.0	7.3	1.8	5.5	1.4
Sciences Natural sciences Physical science Mathematical science Computer science	7.4 40.0	11.5 9.9 8.3 .0	17.0 17.2 .0	10.8 6.3 .0 .0	15.2 14.3 .0	5.3 12.5	13.2 14.8 21.4 .0	11.6 8.2 .0	12.6 12.7 16.7 .0
Biological scienceAgricultural science	18.2 .0	17.2 .0		13.2 .0			15.4 9.1	19.0 8.0	
Social sciences Social science Psychology	9.4 12.9 2.8	12.5 14.3 9.3	/ 8.8	16.1	15.2	10.8		19.5	12.8
Non-S&E ²	8.4	15.4	9.2	8.9	8.2	10.0	7.7	8.8	6.2

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident atiens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies data from NSF/SRS, Survey of Eamed Doctorates



² Non-S&E refers to non-science and non-engineering.

Table 21. Number and percent of doctoral degrees earned by black women which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
				Total,	all black rec	ipients			
Total, all Fields	510	571	614	597	701	726	862	816	843
Science and engineering	153	149	194	170	208	216	270	253	289
Engineering	3	6	8	6	11	13	15	19	23
Sciences Natural sciences Physical science Mathematical science Computer science	150 37 8 3 1	143 33 9 1 0	186 47 6 4 4	164 36 7 0	197 51 10: 1	203 70 14 3 2	255 72 18 1 4	234 60 15 2	266 81 12 2 1
Biological science	24 1	22 1	32 1	24 4	32 4	45 6	43 6	40 0	60 6
Social sciences Social science Psychology	113 52 61	110 38 72	139 53 86	128 50 78	146 71 75	133 55 78	183 71 112	174 59 115	185 71 114
Non-S&E ²	357	422	420	427	493	510	592	563	554
			_	Black red	cipients from	HBCUs	-		
Total, all Fields	46	80	54	56	79	79	81	74	63
Science and engineering	14	14	21	20	30	24	27	26	28
Engineering	0	0	0	0	0	1	o	1	0
Sciences Natural sciences Physical science 1 Mathematical science Computer science	14 6 1 1 0	14 8 2 0 0	21 6 1 0	20 7 0 0	30 11 1 0 0	23 10 1 1 0	27 12 4 0	25 8 0 0 1	28 16 0 2 0
Biological scienceAgricultural science	4 0	6 0	5	7 0	10 0	8 0	8 0	7 0	12 2
Social sciences	8 3 5	6 2 4 66	15 2 13	13 5 8	19 10 9	13 1 12	15 3 12	17 9 8	12 4 8
NON-30E						55	54	48	
				Perc	ent from HB	CUs			
Total, all Fields	9.0	14.0	8.8	9.4	11.3	. 10.9	9.4	9.1	7.5
Science and engineering	9.2	9.4	10.8	11.8	14.4	11.1	10.0	10.3	9.7
Engineering	.0	.0	.0	.0	.0	7.7	.0	5.3	.0
Sciences	9.3 16.2 12.5 33.3	9.8 24.2 22.2 .0 0	11.3 12.8 16.7 .0 .0	12.2 19.4 .0 0	15.2 21.6 10.0 .0	11.3 14.3 7.1 33.3 .0	10.6 16.7 22.2 .0	10.7 13.3 .0 .0 33.3	10.5 19.8 .0 100.0 .0
Biological science	16.7 .0	27.3 .0	15.6 .0	29.2 .0	31.3 .0	17.8 .0	18.6 .0	17.5 0	20.0 33.3
Social sciences Social science Psychology	7.1 5.8 8.2	5.5 5.3 5.6	10.8: 3.8 15.1	10.2 10.0 10.3	13.0 14.1 12.0	9.8 1.8 15.4	8.2 4.2 10.7	9.8 15.3 7.0	6.5 5.6 7.0
Non-S&E ²	9.0	15.6	7.9	8.4	9.9	10.8	9.1	8.5	6.3

¹ In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies data from NSF/SRS. Survey of Earned Doctorates



Non-S&E refers to non-science and non-engineering.

Table 22. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	1			Total, al	Hispanic re	cipients		<u>_</u>	
Total, all Fields	41,361	43,864	49,027	53,007	57,845	62,683	66,691	71,015	74,938
Science and engineering	13,327	13,918	15,351	17,391	18,442	20,529	22,190	23,791	25,266
Engineering	2,561	2,511	2,566	2,733	2,961	3,143	3,651	3.731	4,125
Sciences Natural sciences Physical science Mathematical science Computer science	10,766 4,417 563 373 1,195	11,407 4,357 522 413 1,085	12,785 4,705 533 480 1,215	14,658 4,892 546 482 1,173	15,481 5,034 599 470 1,096	17,386 5,648 733 543 1,135	18,539 6,119 800 536 1,307	20,060 6,764 872 585 1,280	21,141 7,055 853 581 1,267
Biological science Agricultural science	2,090 196	2,119 218	2,264 213	2,477 214	2,652 217	2,901 336	3,090 386	3,521 506	3,793 561
Social sciences	6,349 4,197 2,152	7,050 4,645 2,405	8,080 5,334 2,746	9,766 6,519 3,247	10,447 6,860 3,587	11,738 7,748 3,990	12,420 7,877 4,543	13.296 8,260 5,036	14,086 8,804 5,282
Non-S&E ²	28,034	29,946	33,676	35,616	39,403	42,154	44,501	47,224	49,672
		_	Hispan	ic recipients	from institut	ions in Puer	o Rico		
Total, all Fields	12,202	12,175	12,510	12,755	13,359	13,454	13,792	14,106	14,093
Science and engineering	3,056	2,983	2.952	3,007	3,001	3,205	3,501	3,628	3,849
Engineering	651	626	554	686	697	742	988	915	1,125
Sciences Natural sciences Physical science Mathematical science Computer science	2,405 1,479 184 69 326	2,357 1,447 184 69 261	2,398 1,446 154 108 327	2,321 1,339 172 34 296	2,304 1,300 172 41 254	2,463 1,374 227 27 258	2,513 1,459 311 27 257	2,713 1.658 324 39 263	2,724 1,641 303 24 202
Biological scienceAgricultural science	858 42	862 71	797 60	837 0	833 . 0	808 54	812 52	964 68	1,021 91
Social sciences Social science Psychology	926 501 425	910 495 415	952 523 429	982 496 486	508	1,089 590 499	1,054 554 500	1,055 549 506	1.083 603 480
Non-S&E ²	9,146	9,192	9,558	9,748	10,358	10.249	10,291	10,478	10,244
			P	ercent from	institutions	n Puerto Rio	:0		
Total, all Fields	29.5	27.8	25.5	24.1	23.1	21.5	20.7	19.9	18.8
Science and engineering	22.9	21.4	19.2	17.3	16.3	15.6	15.8	15.2	15.2
Engineering	25.4	24.9	21.6	25.1	23.5	23.6	27.1	24.5	27.3
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	33.5 32.7 18.5	20.7 33.2 35.2 16.7 24.1	28.9 22.5		25.8 28.7 8.7	14.2 24.3 31.0 5.0 22.7	13.6 23.8 38.9 5.0 19.7	13.5 24.5 37.2 6.7 20.5	12.9 23.3 35.5 4.1 15.9
Biological scienceAgricultural science	41.1 21.4	40.7 32.6		33.8 .0		27.9 16.1	26.3 13.5	27.4 13.4	26.9 16.2
Social sciences Social science Psychology	14.6 11.9 19.7	12.9 10.7 17.3	9.8	7.6	7.4	7.6	7.0	7.9 6.6 10.0	6.8
Non-S&E ²	32.6	30.7	28.4	27.4	26.3	24.3	23.1	22.2	20.6

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.



Non-S&E refers to non-science and non-engineering.

Table 23. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1989-97

Field	1989	1990	1991	1002	4002	4004	1005	1000	
. 1180	1303	1330		1992	1993	1994	1995	1996	1997 ————
				Total, al	l Hispanic re	cipients			
Total, all Fields	18,002	18,683	20,781	22,026	23,825	25,860	27,875	29,335	30.550
Science and engineering	7,318	7,434	7,888	8,730	9,160	10,190	11,031	11,592	12,044
Engineering	2,100	2,035	2,039	2,187	2,355	2,495	2,895	2,897	3,196
Sciences	5,218 2,432	5,399 2,328	5,849 2,458	6,543	6,805	7,695	8,136	8,695	8,848
Physical science 1	362 224	311 249	318	2,497 326	2,608 361	2,925 415	3,196 437	3,509 488	3,544 468
Computer science	750	669	259 738	279 724	273 700	300 719	315 876	354 824	340 841
Biological science	965 131	955 144	1,019 124	1,043 125	1,144 130	1,298 193	1,340 228	1,560 283	1,598 297
Social sciencesSocial science	2,786 2,153	3,071 2,384	3,391 2,634	4,046 3,220	4,197 3,269	4,770 3,774	4,940 3,774	5,186 3,860	5.304 4.019
Psychology	633	687	757	826	928	996	1,166	1,326	1,285
Non-S&E ²	10,684	11,249	12,893	13,296	14,665	15,670	16,844	17,743	18,506
			Hispani	c recipients	from institut	ions in Puer	to Rico	_	
Total, all Fields	4,373	4,266	4,569	4,252	4,369	4,513	4,864	4,966	4,948
Science and engineering	1,559	1,462	1,365	1,362	1,339	1,426	1,657	1,711	1,789
Engineering	525	481	398	498	511	534	743	661	791
Sciences Natural sciences	1,034 671	981 626	967 612	864 520	828 496	892 540	914 609	1,050	998 656
Physical science 1	91	90	70	78	70	86	131	692 143	134
Mathematical science Computer science	39 197	47 143	50 170	20 159	24. 147	151 149	16 164	28: 162	16 123
Biological science	322 22	302 44	293 29	263 0	255 0	258 32	265 33	322 37	331 52
Social sciences	363 257	355 252	355	344	332	352	305	358	342
Psychology	106	103	245 110	243 101	211 121	248 104	220 85	218 140	249 93
Non-S&E ²	2,814	2.804	3,204	2,890	3,030	3,087	3,207	3,255	3,159
	'	, , , , , , , , , , , , , , , , , , ,	P	ercent from	institutions i	n Puerto Ric	0.	_	
Total, all Fields	24.3	22.8	22.0	19.3	18.3	17.5	17.4	16.9	16.2
Science and engineering	21.3	19.7	17.3	15.6	14.6	14.0	15.0	14.8	14.9
Engineering	25.0	23.6	19.5	22.8	21.7	21.4	25.7	22.8	24.7
Sciences Natural sciences	19.8 27.6	18.2 26.9	16.5 24.9	13.2	12.2	11.6	11.2	12.1	11.3
Physical science 1	25.1	28.9	22.0	20.8 23.9	19.0 19.4	18.5 20.7	19.1 30.0	19.7 29.3	18.5 28.6
Mathematical science Computer science	17.4 26.3	18.9 21.4	19.3 23.0	7.2 22.0	8.8 21.0	5.0 20.7	5.1 18.7	7.9 19.7	4.7 14.6
Biological science	33.4 16.8	31.6 30.6	28.8 23.4	25.2 .0	22.3 .0	19.9 16.6	19.8 14.5	20.6 13.1	20.7 17.5
Social sciences	13.0	11.6	10.5	8.5	7.9	7.4	6.2	6.9	6.4
Social science Psychology	11.9 16.7	10.6 15.0	9.3 14.5	7.5 12.2	6.5 13.0	6.6 10.4	5.8 7.ß	5.6 10.6	6.2 7.2
Non-S&E ²	26.3	24.9	24.9	21.7	20.7	19.7	19.0	18.3	17.1

¹ In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.



Non-S&E refers to non-science and non-engineering.

Table 24. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997		
				Total, all	Hispanic red	cipients					
	 T					22.222	20.046	41,680	44 200		
Total, all Fields	23,359	25,181	28,246	30,981	34,020	36,823	38,816		44,388		
Science and englneering	6,009	6,484	7,463	8,661	9,282	10,339	11,159	12,199	13,222		
Engineering	461	476	527	546	606	648	756	834	929		
Sciences Natural sciences	5,548 1,985	6,008 2,029	6,936 2,247	8,115 2,395	8,676 2,426	9,691 2,723	10.403 2,923	11,365 3,255	12,293 3.511		
Physical science 1	201 149	211 164	215 221	220 203	238 197	318 243	363 221	384 231	385 241		
Computer science	445	416	477	449	396	416	431	456	426		
Biological science	1,125 65	1,164 74	1,245 89	1,434 89	1,508 87	1,603 143	1,750 158	1,961 223	2,195 264		
Social sciences	3,563	3,979	4,689 2,700	5,720 3,299	6,250 3,591	6,968 3,974	7,480 4,103	8,110 4,400	8,782 4,785		
Social science Psychology	2,044 1,519	2,261 1,718	1,989	2,421	2,659	2,994	3,377	3,710	3,997		
Non-S&E ²	17,350	18,697	20,783	22,320	24,738	26,484	27,657	29,481	31,166		
	Hispanic recipients from institutions in Puerto Rico										
Total, all Fields	7,829	7,909	7,941	8,503	8,990	8,941	8,928	9,140	9,145		
Science and engineering	1,497	1,521	1,587	1,645	1,662	1,779	1,844	1,917	2,060		
Engineering	126	145	156	188	186	208	245	254	334		
Sciences	1,371 808	1,376 821	1,431 834	1,457 819	1,476 804	1,571 834	1,599 850	1,663 966	1,726 985		
Natural sciences Physical science 1	93	94	84	94	102	141	180	181	169 8		
Mathematical science	30 129	22 118		14 137	17 107	12. 109	11 93	11 101	79		
Biological science	536 20	560 27	504 31	574 0		550 22	547 19	642 31	690 39		
Social sciences	563	555		638		737	749	697	741 354		
Social science Psychology	244 319	243 312				342 395	334 415	331 366	387		
Non-S&E ²	6,332	6,388	6,354	6,858	7,328	7,162	7,084	7,223	7,085		
			F	Percent from	institutions	in Puerto Rid	:0				
Total, all Fields	33.5	31.4	28.1	27.4	26.4	24.3	23.0	21.9	20.6		
Science and engineering	24.9	23.5	21.3	19.0	17.9	17.2	16.5	15.7	15.6		
Engineering	27.3	30.5	29.6	34.4	30.7	ĺ	ļ		36.0		
Sciences Natural sciences	24.7 40.7	22.9 40.5							14.0 28.1		
Physical science 1	46.3	44.5	5 39.1	42.7	42.9	44.3	49.6		43.9 3.3		
Mathematical science Computer science	20.1 29.0	13.4 28.4							18.5		
Biological scienceAgricultural science	47.6	48.1 36.5							31.4 14.8		
Social sciences	15.8										
Social science Psychology	11.9										
Non-S&E ²	1	34.2	30.6	30.1	29.6	27.0	25.6	24.5	22.7		

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.



² Non-S&E refers to non-science and non-engineering.

Table 25. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
				Total, a	all Hispanic	recipients		<u> </u>	
Total, all Fields	8,133	8,495	9,684	10,256	11,371	13,177	13,905	15,394	16,360
Science and engineering	1,585	1,587	1,736	1,806	2,092	2,514			
Engineering	468	446	468	488	581	719	711		
Sciences Natural sciences Physical science Mathematical science Computer science	444 92 34	1,141 431 98 51 118	494 96 85	503 5 93 6 66	574 114 78	680 114 75	665 129 75	677 127 91	2,117
Biological science		120 44	1						208 105
Social sciences Social science Psychology	313 360	710 341 369	383	396	474	557	553	596	1,397 626 771
Non-S&E ²	6,548	6,908	7,948	8,450	9,279	10,663	11,320	12,664	13,478
			Hispar	nic recipients	from institu	tions in Pue	rto Rico	_	
Total, all Fields	1,247	1.062	1,223	1,224	1,241	1,682	1,523	1,491	1,544
Science and engineering	214	207	214	140	160	311	289		339
Engineering	. 22	32	23	0	1	86	64	75	83
Sciences Natural sciences Physical science Mathematical science Computer science	192 62 19 6 7	175 65 21 7 0	191 83 16 17 0		159 47 12 14 4	225 68 18 8 5	225 72 17 9 6	91 31 6	256 105 33 7 9
Biological science	17 13	30 7	39 11	11 0	17 0	18 19	20 20	37 12	28 28
Social sciences Social science Psychology	130 25 105	110 25 85	108 31 77	113 32 81	112 30 82	157 36 121	153 17 136	122 28 94	151 27 124
Non-S&E ²	1,033	855	1,009	1,084	1,081	1,371	1,234	1,203	1,205
			P	ercent from	institutions i	n Puerto Ric	:o	<u> </u>	
Total, all Fields	15.3	12.5	12.6	11.9	10.9	12.8	11.0	9.7	9.4
Science and engineering	13.5	13.0	12.3	7.8	7.6	12.4	11.2	10.5	11.8
Engineering	4.7	7.2	4.9	.0	.2	12.0	9.0	10.0	10.8
Sciences Natural sciences Physical science ¹ Mathematical science Computer science	17.2 14.0 20.7 17.6 4.9	15.3 15.1 21.4 13.7 .0	15.1 16.8 16.7 20.0	10.6 5.4 9.7 10.6 .0	10.5 8.2 10.5 17.9 2.5	12.5 10.0 15.8 10.7 3.0	12.0 10.8 13.2 12.0 3.0	10.7 13.4 24.4 6.6 2.9	12.1 14.6 23.7 9.9 4.6
Biological science	13.5 27.1	25.0 15.9	28.7 22.4	7.5 .0	11.3 .0	13.0 10.3	12.0 20.8	19.4 12.6	13.5 26.7
Social sciences	19.3 8.0 29.2	15.5 7.3 23.0	14.0 8.1 19.7	13.9 8.1 19.3	12.0 6.3 17.7	14.1 6.5 21.7	12.7 3.1 20.7	9.3 4.7 13.3	10.8 4.3 16.1
Non-S&E ²	15.8	12.4	12.7	12.8	11.6	12.9	10.9	9.5	8.9

¹ In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.



Non-S&E refers to non-science and non-engineering.

Table 26. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997		
				Total, all	Hispanic red	ipients					
Total, all Fields	3,597	3,713	4,124	4,381	4,875	5,483	5,725	6,072	6,466		
Science and engineering	970	959	992	1,066	1,255	1,427	1,458	1,478	1,576		
Engineering	394	373	378	408	480	582	578	580	589		
Sciences	576	586	614	658	775	845	880	898 402	987 435		
Natural sciences Physical science 1	282 65	275 63	294 73	309 64	341 76	414 80	423 88	80	8		
Mathematical science	21	33	52	47	50	44 120	53 151	57 125	50 14		
Computer science	100	93	84	98	104	ļ					
Biological science Agricultural science	62 34	61 25	54 31	69 31	76 35	65 105	75 56	. 85 55	10 5		
Social sciences	294	311 178	320 196	349 218	434 282	431 290	457 283	496 320	55 34		
Social science	176 118	133	124	131	152	141	174	176	20		
Non-S&E ²	2,627	2,754	3,132	3,315	3,620	4.056	4,267	4,594	4.89		
	Hispanic recipients from institutions in Puerto Rico										
Total, all Fields	416	365	386	398	402	586	500	497	53		
Science and engineering	103	103	80	48	56	154	130	144	14		
	21	26	ļ.			68	51	61	5		
Engineering				1		86	79	83	g		
SciencesNatural sciences	82 35	77 33	65	48	23	43	47	49	4		
Physical science 1	14 2	11	9			15 5	14				
Mathematical science	4	3				3	3				
Riological science	5	· 14				.8	10		i		
Agricultural science		5	1	1		12	l	1			
Social sciences	47 16	44 10				43 25	32		:		
Social science Psychology	31	34				18	23	20] :		
Non-S&E ²	313	262	306	350	346	432	370	353	3.		
		l	1	Percent from	n institutions	in Puerto Ri	со				
Total, all Fields	11.6	9.8	9.4	9.	1 8.2	10.7	8.7	8.2			
Science and engineering	1.	10.7	8.	1 4.:	5 4.5	10.8	8.9	9.7	9		
Engineering		7.0	4.0	ا. (ر	o .2	11.7	8.8	10.5			
Sciences	14.2										
Natural sciences Physical science 1	12.4			3 3. 3 6.				9 20.0	2		
Mathematical science	9.5	9.1	1 17.	3∤ 8.	5 22.0						
Computer science	4.0			.	0 1.0		1				
Biological science	8.1 29.4				8 6.6 0 .0			- 1 - 4 - 4			
-	l.		1	1		1	1	1 .			
Social sciencesSocial science	, 9.1	5.0	6 4.	1 6.	4 5.7	8.0	6 3.	2 4.4	I		
Psychology	26.3	25.0	6 14.	5 16.	8 10.5	5 12.	3 13.	2 11.4			
Non-S&E ²	11.9	9.9	5 9.	8 10.	.6 9.0	10.	7 8.	7.	'		

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.



Non-S&E refers to non-science and non-engineering.

Table 27. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
				Total, a	II Hispanic r	ecipients			L
Total, all Fields	4,536	4,782	5,560	5,875	6,496	7,694	8,180	9,322	9,894
Science and engineering	615	628	744	740	837	1,087	1,127	1,252	1,306
Engineering	74	73	90	80	101	137	133	168	176
Sciences	541	555	654	660	736	950	994	1.084	1,130
Physical science 1	162 27	156 35	200 23	194 29	233 38	266 34	242 41	275 47	285 53
Mathematical science Computer science	13 44	18 25	33 44	19 51	28 58	31 49	22 47	34 48	21 56
Biological science Agricultural science	64 14	59 19	82 18	77 18	75 34	73 79	92 40	106 40	101 54
Social sciences	379	399	454	466	503	684			
Social science Psychology	137 242	163 236	187 267	178 288	192 311	267 417	752 270 482	809 276 533	845 282 563
Non-S&E ²	3,921	4,154	4.816	5,135	5,659	6,607	7,053	8,070	8,588
			Hispan	c recipients	from institut	ions in Puer	to Rico		
Total, all Fields	831	697	837	826	839	1,096	1,023	994	1,013
Science and engineering	111	104	134	92	104	157	159	144	191
Engineering	1	6	8	0	0	18	13	14	27
Sciences Natural sciences	110 27	98 32	126	92	104	139	146	130	164
Physical science ¹	5	10	44 7	15 5	24 6	25 3	25 3	42 15	57 14
Mathematical science Computer science	3	4 0	8 0	3	3	3 2	3	3	3
Biological science	12 3	16 2	26 3	7 0	12 0	10 7	10 6!	18 4	17 18
Social sciences	83	66	82	77	80	114	121	88	107
Social science	9 74	15 51	23 59	18 59	14 66	11 103	8 113	14 74	11 96
Non-S&E ²	720	593	703	734	735	939	864	850	822
				ercent from i	institutions i	n Puerto Ric	l o		
Total, all Fields	18.3	14.6	15.1	14.1	12.9	14.2	42.5	40.7	100
Science and engineering	18.0	16.6	18.0	12.4	12.9	14.2 14.4	12.5 14.1	10.7 11.5	10.2 14.6
Engineering	1.4	8.2	8.9	.0	.0		9.8	8.3	15.3
Sciences	20.3	17.7	19.3	13.9	14.1	14.6	14.7	12.0	14.5
Natural sciences Physical science 1	16.7 18.5	20.5 28.6	22.0 30.4	7.7 17.2	10.3 15.8	9.4 8.8	10.3 7.3	15.3 31.9	20.0 26.4
Mathematical science	30.8 6.8	22.2	24.2	15.8 .0	10.7 5.2	9.7 4.1	13.6 6.4	8.8 4.2	14,3 8.9
Biological science	18.8 21.4	27.1 10.5	31.7 16.7	9.1 .0	16.0 .0	13.7 8.9	10.9 15.0	17.0 10.0	16.8 33.3
Social sciences	21.9	16.5	18.1	16.5	15.9	16.7	16.1	10.9	12.7
Social science Psychology	6.6 30.6	9.2 21.6	12.3 22.1	10.1 20.5	7.3 21.2	4.1 24/7	3.0 23.4	5.1 13.9	3.9 17.1
Non-S&E ²	18.4	14.3	14.6	14.3	13.0	14.2	12.3	10.5	9.6

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES:

Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.





Non-S&E refers to non-science and non-engineering.

Table 28. Number of earned doctoral degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1989-97

	1989	1990	1991	1992	1993	1994	1995	1996	1997			
Field	1909	1990	1991		1		1555	1330				
				Total, all	Hispanic re	cipients						
Total, all Fields	694	837	867	909	973	1,030	1,061	1,105	1,183			
Science and engineering	382	468	492	513	542	548	571	623	653			
Engineering	47	54	60	71	66	66	77	98	97			
Sciences	335 172 68 11 4	414 212 85 10 5	432 212 81 9 12	442 228 88 12 8	476 249 92 16 7	482 274 98 13 7	494 255 86 15 6	525 255 85 10 16	556 290 83 18 17			
Biological science	71 18	89 23	95 15	102 18	114 20	131 25	127 21	131 13	146 26			
Social sciences Social science Psychology	163 70 93	202 93 109	220 98 122	214 81 133	227 96 131	208 75 133	239 94 145	270 97 173	266 97 169			
Non-S&E ²	312	369	375	396	431	482	490	482	530			
	Hispanic recipients from institutions in Puerto Rico											
Total, all Fields	17	33	25	50	31	57	51	43	88			
Science and engineering	12	18	12	26	14	30	36	29	49			
Engineering	٥	o	0	0	0	o	٥	o	0			
Sciences Natural sciences Physical science Mathematical science Computer science	12 5 4 0 0	18 8 6 0	12 5 3 0 0	26 5 4 0	6 4 0	30 12 7 0	36 5 5 0	29 3 3 0 0	49 6 5 0			
Biological scienceAgricultural science	1 0	2 0	2	1 0			0	0	0			
Social sciences Social science Psychology	7 1 6	10 0 10	7 1 6	21 5 16	i 0	1	31 0 31	26 0 26	43 1 42			
Non-S&E ²	5	15	13	24	17	27	15	14	39			
			F	ercent from	institutions	in Puerto Ric	:0					
Total, all Fields	2.4	3.9	2.9	5.5	3.2	5.5	4.8	3.9	7.4			
Science and engineering	3.1	3.8	2.4	5.1	2.6	5.5	6.3	4.7	7.5			
Engineering	.0	.0	.0	.c	٥. أد	٥. ا	ە. ا	.0	.0			
Sciences Natural sciences Physical science 1 Mathematical science Computer science	2.9 5.9 .0	4.3 3.8 7.1 .0	2.8 2.4 3.7 .0	2.2 4.5	2 2.4 5 4.3 0 .0	4.4 7.1 0	2.0 5.8 .0	1.2 3.5 0	2.1 6.0 .0			
Biological science Agricultural science	1.4	2.2 .0										
Social sciences Social science Psychology	4.3 1.4	5.0 .0 9.2	1.0	6.2	2 .0) 1.3	.0	.0	1.0 24.9			
Non-S&E ²	1.6	4.1	3.5	6.	1 3.9	5.6	3.1	2.9	7.4			

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies data from NSF/SRS, Survey of Earned Doctorates



Non-S&E refers to non-science and non-engineering.

Table 29. Number of earned doctoral degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997		
				Total, a	II Hispanic re	ecipients		<u> </u>			
Total, all Fields	376	449	458	482	517	518	539	564	617		
Science and engineering	227	290	306	308	320	318	339	351	388		
Engineering	39	45	50	56	54	60	66	84	74		
Sciences Natural sciences Physical science Mathematical science Computer science	188 120 47 7 1	245 138 55 6 4	256 152 68 5 11	252 151 62 9 7	266 162 70 14 6	258 174 75 10 7	273 168 59 11 2	267 160 67 10 9	314 193 64 12		
Biological science	50 15	56 17	56 12	59 14	57 15	69 13	80 16	65 9	83 19		
Social sciences	68 38 30	107 55 52	104 52 52	101 46 55	104 59 45	84 41 43	105 57 48	107 54 53	121 59 62		
Non-S&E ²	149	159	152	174	197	200	200	213	229		
	Hispanic recipients from institutions in Puerto Rico										
Total, all Fields	5	9	7	14	10	18	16	15	29		
Science and engineering	3	6	3	11	7	11	13	11	17		
Engineering	0	0	0	0	o	0	o	0	0		
Sciences Natural sciences Physical science Mathematical science Computer science	3 2 2 0 0	6 2 1 0	3 2 2 0 0	11 4 3 0 0	7 4 2 0	11 6 5 0	13 4 4 0 0	11 2 2 0 0	17 3 3 0 0		
Biological scienceAgricultural science	0	1 0	0 0	1 0	2 0	1 0	0	0	0		
Social sciences	1 0 1	4 0 4	1 0 1	7 0 7	3 0 3	5 0 5	9 0 9	9 0 9	14 0 14		
Non-S&E ²	2	3	4	3	3	7	3	4	12		
	Percent from institutions in Puerto Rico										
Total, all Fields	1.3	2.0	1.5	2.9	1.9	3.5	3.0	2.7	4.7		
Science and engineering	1.3	2.1	1.0	3.6	2.2	3.5	3.8	3.1	4.4		
Engineering	.0	.0	.0	.0	.0	.0	.0	٥.	.0		
Sciences Natural sciences Physical science 1 Mathematical science Computer science	1.6 1.7 4.3 .0 .0	2.4 1.4 1.8 .0	1.2 1.3 2.9 .0 .0	4.4 2.6 4.8 .0	2.6 2.5 2.9 .0	4.3 3.4 6.7 .0 .0	4.8 2.4 6.8 .0	4.1 1.2 3.0 .0	5.4 1.6 4.7 .0		
Biological science	.0	1.8	.0	1.7 .0	3.5 .0	1.4 .0	.0 .0	.0 .0	.0 .0 .0		
Social sciences	1.5 .0 3.3	3.7 .0 7.7	1.0 .0 1.9	6.9 .0 12.7	2.9 .0 6.7	6.0 .0 11.6	8.6 .0 18.8	8.4 .0 17.0	11.6 .0 22.6		
Non-S&E ²	1.3	1.9	2.6	1.7	1.5	3.5	1.5	1.9	5.2		

¹ In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies data from NSF/SRS, Survey of Earned Doctorates



Non-S&E refers to non-science and non-engineering.

Table 30. Number of earned doctoral degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997			
		1		Total, all	Hispanic red	cipients		1				
Total, all Fields	318	388	409	427	456	512	522	541	566			
Science and engineering	155	178	186	205	222	230	232	272	265			
Engineering	8	9	10	15	12	6	11	14	23			
Sciences Natural sciences Physical science Mathematical science Computer science	147 52 21 4 3	169 74 30 4 1	176 60 13 4 1	190 77 26 3	210 87 22 2 1	224 100 23 3 0	221 87 27 4 4	258 95 18 0 7	242 97 19 6 2			
Biological scienceAgricultural science	21 3	33 6	39 3	43 4	57 5	62 12	47 5	66	63 7			
Social sciences Social science Psychology	95 32 63	95 38 57	116 46 70	113 35 78	123 37 86	124 34 90	134 37 97	163 43 120	145 38 107			
Non-S&E ²	163	210	223	222	234	282	290	269	301			
	Hispanic recipients from institutions in Puerto Rico											
Total, all Fields	12	24	18	36	21	39	35	28	59			
Science and engineering	9	12	9	15	7	19	23	18	32			
Engineering	0	0	0	0	. 0	0	. 0	0	0			
Sciences	9 3 2 0 0	12 6 5 0	9 3 1 0 0	15 1 1 0 0	2 2 0	19 6 2 0 0	23 1 1 0 0	18 1 1 0	32 3 2 0			
Biological scienceAgricultural science	1 0	1 0	2 0	0		4	0		1 0			
Social sciences	6 1 5	6 0 6	6 1 5	14 5 9	5	12	22 0 22	17	29 1 28			
Non-S&E ²	3	12	9	21	14	20	12	10	27			
			F	Percent from	institutions	in Puerto Ri	:o					
Total, all Fields	3.8	6.2	4.4	8.4	4.6	7.6	6.7	5.2	10.4			
Science and engineering	5.8	6.7	4.8	7.3	3.2	8.3	9.9	6.6	12.1			
Engineering	.0	.0	.0	.0	0. (c	.0) .c	0.	.0			
Sciences Natural sciences Physical science Mathematical science Computer science	9.5 .0	7.1 8.1 16.7 .0	5.0 7.7 .0	1.3 3.8).	2.3 3 9.1 0 .0	6.0 8.7 .0	1.1 3.7	1.1 7 5.6 0 0	3.1 10.5 .0			
Biological science	4.8	3.0 .0										
Social sciences Social science Psychology	6.3		2.2	14.3	3 .0	2.9)!	0 .0	2.6 26.2			
Non-S&E ²	1.8	5.7	4.0	9.	5 6.0	7.1	4.	1 3.7	9.0			

In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

NOTES: Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies data from NSF/SRS. Survey of Earned Doctorates



Non-S&E refers to non-science and non-engineering.

Table 31. Number of earned bachelor's degrees awarded in engineering technologies, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997		
					Total				<u> </u>		
Total	20,098	19,150	18,294	17,113	16,987	16,654	16,542	16.156	14,584		
U.S. citizens and permanent residents, total 1	19,439	18,423	17,582	16,597	16,546	16,161	15.992	15,571	14.027		
White, non-Hispanics	16,156 839	15,251 755	14,279	13,286	13,245		12,616	12,032	10,946		
Underrepresented minorities, totalBlack, non-Hispanics	1,947 1,208	2,053 1,200	768 2,033 1,227	778 2,074 1,239	768 2,096 1,132	720 2,160 1,249	727 2,317 1,319	730 2,470 1,370	473 2,244 1,423		
Hispanics American Indians or Alaskan Natives U.S. citizens and permanent	634 105	784 69	731 75	747 88	853 111	813 98	883 115	988 112	722 99		
residents, unknown race/ethnicity	497	364	502	459	437	372	332	339	364		
Nonresident aliens ²	659	. 727	712	516	441	493	550	585	557		
				Men							
Total	17,999	17,113	16,329	15,309	15,089	14,835	14,649	14,325	12,889		
U.S. citizens and permanent residents, total 1	17,383	16,431	15,660	14,841	14,687	14,401	14,141	13,794	12,379		
White, non-Hispanics	14,578 743	13,679 679	12,819 700	12,069	11,908	11,694	11,332	10,882	9,836		
Underrepresented minorities, total Black, non-Hispanics Hispanics American Indians or Alaskan Natives	1,601 941 567 93	1,733 953 722	1,692 968 655	690 1,659 949 629	678 1,694 892 710	641 1,729 959 687	637 1,881 1,042 741	656 1,956 1,041 828	421 1,781 1,095 604		
U.S. citizens and permanent residents, unknown race/ethnicity	461	58 340	69 449	81 423	92	83	98	87	82		
Nonresident aliens ²	616	682	669	468	407 402	337 434	291 508	300 531	341 510		
	Women 9										
7							_				
U.S. citizens and permanent residents.	2,099	2,037	1,965	1,804	1,898	1,819	1,893	1,831	1,695		
total 1	2,056	1,992	1,922	1,756	1,859	1,760	1,851	1,777	1,648		
White, non-Hispanics	1,578 96	1,572 76	1,460	1,217 88	1,337 90	1,215 79	1,284 90	1,150 74	1,110 52		
Underrepresented minorities, total	346 267 67	320 247 62	341 259 76	415 290 118	402 240 143	431 290	436 277	514 329	463 328		
American Indians or Alaskan Natives U.S. citizens and permanent	12	11	6	7	143	126 15	142 17	160 25	118 17		
residents, unknown race/ethnicity Nonresident aliens 2	36 43	24 45	53 43	36 48	30	35	41	39	23		
			43	48	39	59	42	54	47		

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Engineering technologies are instructional programs that prepare individuals to support and assist engineering and related professionals or to independently provide such services. Programs stress specialized, practical knowledge related to the mathematical, scientific, or technical aspects of engineering and related sciences.



Nonresident aliens include foreign citizens on temporary visas only.

Table 32. Number of earned master's degrees awarded in engineering technologies, by citizenship, race/ethnicity and sex of recipient: 1989-97

			1						
Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	1				Total		•		
Total	1,135	1,194	1,188	1,278	1,555	1,547	1,577	1,651	1,414
U.S. citizens and permanent residents, total 1	1,004	1,032	1,016	1,063	1,276	1,256	1,268	1,353	1,153
White, non-Hispanics	802 40	823 79	830 60	817 58	1,041 40	994 46	982 55	1,053 61	950 49
Underrepresented minorities, total	67	58	69	92	94	112	131	135	115
Black, non-Hispanics	55 10	44 9	47 19	64 23	61 25	72! 37	85 40	81 47	86 26
Hispanics	2	5	3	5	8	3	6	7	3
residents, unknown race/ethnicity	95	72	57	96	101	104	100	104	39
Nonresident aliens ²	131	162	172	215	279	291 ———	309	298	
					Men				
Total	892	888	888	971	1,172	1,164	1,136	1,179	1,012
U.S. citizens and permanent residents, total 1	789	757	757	815	961	949	940	990	842
White, non-Hispanics	631	607	619	619	783	753	726	777	704
Asians	36	40	39	45	28	33	41	41 87	34 76
Underrepresented minorities, total	48 40	43 32	47 1 29	66 46	57 32	75 48		51	56
Black, non-Hispanics	47	7	17 17	16	18	27	32	32	17
American Indians or Alaskan Natives	i i	. 4	1	4	7	0		4	3
U.S. citizens and permanent residents, unknown race/ethnicity	74	67	52	85	93	88	84	85	28
Nonresident aliens ²	103	131	131	156	211	215	196	189	170
					Women				_
Total	243	306	300	307	383	383	441	472	402
U.S. citizens and permanent residents, total 1	215	275	259	248	315	307	328	363	311
White, non-Hispanics	171 4	216 39	211 21			241 13		276 20	246 15
AsiansUnderrepresented minorities, total		15	22			37		48	39
Black non-Hispanics	15	12	18	18	29	24		30	30
Hispanics	3	2	2			10		15	9
American Indians or Alaskan Natives	1	1	2	1	1		' '	1 3	"
U.S. citizens and permanent residents, unknown race/ethnicity	21	5	5	11	8	16	16	19	11
Nonresident aliens ²	28	31	41	59	68	76	113	109	91

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Engineering technologies are instructional programs that prepare individuals to support and assist engineering and related professionals or to independently provide such services. Programs stress specialized, practical knowledge related to the mathematical, scientific, or technical aspects of engineering and related sciences.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey



⁷¹ 73

² Nonresident aliens include foreign citizens on temporary visas only.

Table 33. Number of earned bachelor's degrees awarded in health fields, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Total				_
Total	60.114	59,852	60,228	62,655	67,942	75,229	80,629	84.759	86.243
U.S. citizens and permanent residents,	ŀ				1	- 1		}	
total 1	59,367	59,056	59,250	61,792	66,929	74,200	79,608	83,641	85,135
White, non-Hispanics	49,854	48,405	48,798	51,328	55,482	61,624	64,992	67,509	67,823
Asians	1,698	1,823	1,981	2,229	2,469	3,024	3,488	3,952	4,428
Underrepresented minorities, total	6,474 3.886	6,890 4.056	6,881	7,048	7,758	8,225	9,453	10,417	10,915
Black, non-Hispanics	2.348	2,580	4,122 2,481	4,151 2,571	4,670 2,747	4,817 3,018	5,691 3,305	6,186 3,722	6,438 3,939
American Indians or Alaskan Natives U.S. citizens and permanent	240	254	278	326	341	390	457	509	538
residents, unknown race/ethnicity	1,341	1,938	1,590	1,187	1,220	1,327	1,675	1,763	1,969
Nonresident aliens 2	747	796	978	863	1,013	1,029	1,021	1,118	1,108
	<u>.</u>				Men		•	*	
Total	9,068	9,418	9,855	10,305	11,467	13,180	14,564	15,561	16,008
U.S. citizens and permanent residents,				1					
total 1	8,842	9,176	9,572	10,057	11,189	12,912	14,295	15,309	15,717
White, non-Hispanics	7.339	7,521	7.717	8,230	9.081	10.627	11,503	12,249	12.367
Asians	398	392	468	541	561	694	891	968	1,108
Underrepresented minorities, total	899	1,030	1,094	1,032	1,285	1,315	1,595	1,781	1,876
Black, non-Hispanics	451 401	502	525	530	673	659	850	920	940
Hispanics American Indians or Alaskan Natives	401	491 37	519 50	441 61	545 67	576 80	652 93	768 93	820 110
U.S. citizens and permanent residents, unknown race/ethnicity	206	233	293	254	262	276	306	311	366
Nonresident aliens ²	226	242	283	248	278	268	269	252	291
					Women				
Total	51,046	50,434	50,373	52,350	56,475	62.049	66.065	69,198	70,235
		.	•		,	,- (-	,-20		
U.S. citizens and permanent residents, total 1	50,525	49,880	49,678	51,735	55,740	61,288	65,313	68,332	69,418
White, non-Hispanics	42,515	40,884	41,081	43.098	46.401	50.997	53.489	55,260	55.456
Asians	1,300	1,431	1,513	1,688	1,908	2,330	2,597	2,984	3,320
Underrepresented minorities, total	5,575	5,860	5,787	6,016	6,473	6,910	7,858	8,636	9,03
Black, non-Hispanics	3,435 1,947	3,554 2,089	3,597	3,621	3,997	4,158	4,841	5,266	5,49
American Indians or Alaskan Natives	1,947	2,089	1,962 228	2,130 265	2,202 274	2,442 310	2,653 364	2,954 416	3,110 425
U.S. citizens and permanent	.33	-''	220	200	2/4	310	304	410	42
residents, unknown race/ethnicity	1,135	1,705	1,297	933	958	1,051	1,369	1,452	1,603
Nonresident aliens 2	521	554	695	615	735	761	752	866	817

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

NOTE: Health fields includes the medical and other health sciences shown in section C.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey

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74



Nonresident aliens include foreign citizens on temporary visas only.

Table 34. Number of earned master's degrees awarded in health fields, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
				1	Total				
Total	19,410	20,482	21,398	23,213	25,823	28,314	31,481	33,475	36,014
U.S. citizens and permanent residents, total 1	18,337	19,400	20,160	21,903	24,357	26,814	29,734	31,960	34,335
White, non-Hispanics Asians Underrepresented minorities, total	15,474 537 1,430	16,284 600 1,523	17,002 600 1,667	18,464 709 1,867	20,509 830 2,084	22,154 962 2,528	24,141 1.519 2.784	25,894 1,727 3,159	27,968 1.594 3,226
Black, non-Hispanics	814	886	1,004	1,092	1,251	1,431	1,609	1,804	1,910
Hispanics American Indians or Alaskan Natives U.S. citizens and permanent	535 81	558 79	572 91	685 90	718 115	967 130	1.049 126	1,205 150	1,150 166
residents, unknown race/ethnicity	896	993	891	863	934	1,170	1,290	1,180	1,547
Nonresident aliens ²	1,073	1,082	1,238	1,310	1,466	1,500	1,747	1,515	1,679
					Men				
Total	4,239	4,554	4,499	4,714	5,248	5,874	6,793	6,980	7,697
U.S. citizens and permanent residents, total 1	3,720	4,080	3,956	4,175	4,638	5,274	6,078	6,352	7,011
White, non-Hispanics	3,094	3,309	3,215	3,399	3,807	4,216	4,658	4,870	5,557
Asians	162 321	181 313	170 362	215 352	222 399	295 495	578 568	615 608	501 621
Underrepresented minorities, total	173	158	194	171	207	220	280	298	325
Hispanics	128	135	146	158	172	250	261	271	264
American Indians or Alaskan Natives U.S. citizens and permanent	20	20	22	23	20	25	27	39	32
residents, unknown race/ethnicity	143	277	209	209	210	268	274	259	332
Nonresident aliens ²	519	474	543	539	610	600	715	628	686
				-	Women	<u>-</u>			
Total	15,171	15.928	16,899	18,499	20,575	22,440	24,688	26,495	28,317
U.S. citizens and permanent residents, total 1	14,617	15,320	16,204	17,728	19,719	21,540	23,656	25,608	27,324
White, non-Hispanics	12,380	12,975	13,787	15,065	16,702	17,938	19,483	21,024	22,411
Asians Underrepresented minorities, total	375 1,109	419 1,210	430 1,305	494 1,515	608 1,685	667 2,033	941 2,216	1,112 2,551	1.093 2.605
Black, non-Hispanics	641	728	810	921	1,005	1,211		1,506	1,585
Hispanics	407	423	426	527	546	717	788	934	886
American Indians or Alaskan Natives U.S. citizens and permanent	61	59	69	67	95	105	99	111	134
residents, unknown race/ethnicity	753	716	682	654	724	902	1,016	921	1,215
Nonresident aliens 2	554	608	695	771 ·	856	900	1,032	887	993

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

NOTE: Health fields includes the medical and other health sciences shown in section C.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey

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² Nonresident aliens include foreign citizens on temporary visas only.

Table 35. Number of earned doctoral degrees awarded in health fields, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	1				l Total				
Total	974	956	1,041	1,112	1,197	1,296	1,330	1,324	1,42
U.S. citizens and permanent residents, total 1	756	756	839	855	939	1,050	1,045	1,016	1,01
White, non-Hispanics	684 22	662 39	720 · 44	735 52	800 45	867 94	835 94	822 89	82 8
Underrepresented minorities, total	43	50	61	56	89	77	99	91	9
Black, non-Hispanics	29 11	32 17	40 16	38 13	59 24	46 25	60 30	49 38	5
American Indians or Alaskan Natives	3	1	5	5	6	6	9	30	•
U.S. citizens and permanent residents, unknown race/ethnicity	7	5	14	12	5	12	17	14	
Nonresident aliens ²	134	166	171	226	214	230	245	267	25
Citizenship unknown	84	34	31	31	44	16	40	41	15
					Men				
Total	345	364	373	402	420	453	487	463	48
U.S. citizens and permanent residents, total 1	225	239	252	226	260	328	325	292	28
White, non-Hispanics	195	203	199	177	208	258	234	211	2
Asians	13	17	21	22	22	48	52	47	
Underrepresented minorities, total	13 9	17 14	27 17	21	26	19	35 18	30 13	
Black, non-Hispanics	4	2	'7	14	18 8	11 7	15	16	
American Indians or Alaskan Natives	이	1	3	3	0	1	2	1	
U.S. citizens and permanent residents, unknown race/ethnicity	4	2	5	6	4	3	4	4	
Nonresident aliens ²	87	101	101	159	138	115	142	151	1
Citizenship unknown	33	24	20	17	22	10	20	20	
					Women				
Total	629	592	668	710	777	843	843	861	9
U.S. citizens and permanent residents, total 1	531	517	587	629	679	722	720	724	7
White, non-Hispanics	489	459	521	558	592	609	601	611	6
Asians	9	22	23	30	23	46	42	42	
Underrepresented minorities, total	30 20	33 18	34 23	35 24	63 41	58 35	64 42	61 36	
Black, non-Hispanics	7	15	9	9	16	18	15	22	
American Indians or Alaskan Natives	3	0	2	2	6	5	7	3	
U.S. citizens and permanent residents, unknown race/ethnicity	3	3	9	6	1	9	13	10	
Nonresident aliens ²	47	65	70	67	76	115	103	116	
Citizenship unknown	51	10	11	14	22	6	20	21	

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

NOTE: Health fields includes the medical and other health sciences shown in section C.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from NSF/SRS. Survey of Earned Doctorates



² Nonresident aliens include foreign citizens on temporary visas only.

Table 36. First-professional degrees awarded, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	•	•		-	Total		•		
Total	71,318	71,551	72,636	74,801	76,068	76,000	76,457	77,505	79,169
U.S. citizens and permanent residents, total 1	70,358	70,515	71,550	73,459	74,520	74,563	74,846	75,873	77,515
White, non-Hispanics	59,597 2,903	59,376 3,299	59,692 3,772	59,869 4,757	60,338 5,107	58,476 5,759	58,239 6,277	58,179 6,513	58,769 7,234
Underrepresented minorities, total Black, non-Hispanics Hispanics	6,025 3,017 2,746	6 549 3 337 2 959	6,984 3,535 3,191	7,334 3,568 3,472	8,075 4,078 3,632	8,314 4,329 3,623	8,877 4,657 3,816	9,501 4,905 4,143	9,846 5,153 4,192
American Indians or Alaskan Natives U.S. citizens and permanent	262	253	258	294	365	362	404	453	501
residents, unknown race/ethnicity Nonresident aliens 2	1,833 960	1,291	1,102 1,086	1,499	1,000	2,014 1,437	1,453	1,680	1,666 1,654
·	Men								
*	45,399	44,309	44,226	45,459	45,565	45,068	45,193	45,182	45,747
Total	45,399	44,309	44,220	45,459	45,565	45,000	45,195	45,102	40,747
U.S. citizens and permanent residents, total ¹	44,728	43,607	43,464	44,511	44,462	44,053	44,112	44,064	44,619
White, non-Hispanics	38,499 1,772	37,367 1,946	36,926 2,171	37,089 2,728	36,896 2,831	35,526 3,139	35.409 3,423	34,972	35,077 3,887
Underrepresented minorities, total	3,375 1,568 1,661	3,501 1,627 1,738	3,663 1,653 1,868	3,831 1,620 2,054	4,122 1,777 2,156	4,155 1,851 2,088	4,388 2,036 2,134	4,589 2,058 2,281	4,679 2,139 2,258
American Indians or Alaskan Natives U.S. citizens and permanent residents, unknown race/ethnicity	1,082	136 793	142 704	157 863	189) 613	216 1,233	218 892	1,020	282 976
Nonresident aliens 2	671	702	762	948	1,103	1,015	1,081	1,118	1,128
		<u> </u>			Women				-
Total	25,919	27,242	28,410	29,342	30,503	30,932	31,264	32,323	33,422
U.S. citizens and permanent residents,	25,630	26,908	28,086	28,948	30,058	30,510	30,734	31,809	32,896
White, non-Hispanics	21,098 1,131	22,009 1,353	22,766 1,601	22,780 2.029	23,442 2,276	22,950 2,620	22,830 2,854	23,207 3,030	23,692 3,347
Underrepresented minorities, total Black, non-Hispanics	2,650 1,449	3,048 1,710	3,321 1,882	3,503 1,948	3,953 2,301	4,159 2,478	4,489 2,621	4,912 2,847	5,167 3,014
HispanicsAmerican Indians or Alaskan Natives U.S. citizens and permanent	1,085 116	1,221 117	1,323 116	1,418 137	1,476 176	1,535 146	1,682 186	1,862 203	1,934 219
residents, unknown race/ethnicity		498	398	636	387	781		660	690
Nonresident aliens ²	289	334	324	394	445	422	530	514	526

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).



² Nonresident aliens include foreign citizens on temporary visas only.

NOTE: First-professional degrees are defined as those that require at least 6 years of college work for completion and 2 years of pre-professional training. First-professional degrees include: Chiropractic, Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry, Veterinary Medicine, Law, Divinity/Ministry, and Rabbinical and Talmudic Studies.

SOURCE: Tabulated by National Science Foundation/Division of Science Resource Studies; data from Department of Education/National Center or Education Statistics: Integrated Postsecondary Education Data System Completions Survey

Table 37. First-professional degrees awarded in health fields, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Totai				
Total	29,518	28.787	28.183	28,303	29,475	29,680	30,757	31,250	32,114
U.S. citizens and permanent residents, total 1	29,036	28,252	27,677	27,600	28,693	28,861	29,867	30,329	31,226
White, non-Hispanics	24.094 1,978 2,591	23,027 2,290 2,724	21,958 2,472 2,777	21,333 2,909 2,840	22,076 3,317 2,915	21,730 3.637 3.000	22,242 3,996 3,110	22.314 4.075 3,412	23,187 4,127 3,469
Black, non-Hispanics Hispanics American Indians or Alaskan Natives U.S. citizens and permanent	1,159 1,323 109	1,251 1,373 100	1,285 1,381 111	1,288 1,417 135	1,350 1,426 139	1,437 1,432 131	1,525 1,461 124	1,646 1,600 166	1,800 1,472 197
residents, unknown race/ethnicity	373	211	470	518	385	494	519	528	443
Nonresident aliens ²	482	535	506	703	782	819	890	921	888
					Men		_		
Total	19,596	18,562	17,777	17,694	17,704	17,565	17,975	17,927	18,308
U.S. citizens and permanent residents, total 1	19,283	18,235	17,449	17,220	17,194	17,034	17,424	17,335	17,719
White, non-Hispanics Asians Underrepresented minorities, total Black, non-Hispanics Hispanics American Indians or Alaskan Natives	16,298 1,217 1,506 581 861 64	15,232 1,363 1,510 606 847 57	14,207 1,440 1,479 573 841 65	13,607 1,718 1,587 604 907 76	13,608 1,859 1,490 556 858 76	13,243 1,972 1,504 582 840 82	13,352 2,190 1,572 649 858 65	13,215 2,217 1,589 621 874 94	13,702 2,198 1,583 672 790 121
U.S. citizens and permanent residents, unknown race/ethnicity	262	130	323	308	237	315	310	314	236
Nonresident aliens ²	313	327	328	474	510	531	551	592	589
	·			-	Women				
Total	9,922	10,225	10,406	10,609	11,771	12,115	12,782	13,323	13,806
U.S. citizens and permanent residents, total 1	9,753	10,017	10,228	10,380	11,499	11,827	12,443	12,994	13.507
White, non-Hispanics Asians Underrepresented minorities, total Black, non-Hispanics Hispanics	462	7,795 927 1,214 645 526	7,751 1,032 1,298 712 540	1,191 1,253 684 510	8,468 1,458 1,425 794 568	8,487 1,665 1,496 855 592	1,538 876 603	9,099 1,858 1.823 1,025 726	9,485 1,929 1,886 1,128 682
American Indians or Alaskan Natives U.S. citizens and permanent residents, unknown race/ethnicity	45 111	43	147		63 148	179		72	76 207
residents, dikilomi recoverancity	''']	, ,,,	-	'**	288	-	329	299

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

NOTES: First-professional degrees are defined as those that require at least 6 years of college work for completion and 2 years of pre-professional training.

Health fields include: Chiropractic, Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry, and Veterinary Medicine.

SOURCE: Tabulated by National Science Foundation/Division of Science Resource Studies; data from Department of Education/National Center or Education Statistics: Integrated Postsecondary Education Data System Completions Survey



² Nonresident aliens include foreign citizens on temporary visas only.

Table 38. First-professional degrees awarded in non-health fields, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
				•	Total	_		•	
Total	41,800	42,764	44,453	46,498	46,593	46,320	45,700	46,255	47,055
U.S. citizens and permanent residents, total 1	41,322	42,263	43,873	45,859	45,827	45,702	44,979	45,544	46,289
White, non-Hispanics Asians Underrepresented minorities, total Black, non-Hispanics Hispanics American Indians or Alaskan Natives	35,503 925 3,434 1,858 1,423 153	36,349, 1,009 3,825 2,086 1,586	37,734 1,300 4,207 2,250 1,810	38,536 1,848 4,494 2,280 2,055 159	38,262 1,790 5,160 2,728 2,206 226	36,746 2,122 5,314 2,892 2,191 231	35,997 2,281 5,767 3,132 2,355 280	35,865 2,438 6,089 3,259 2,543 287	35,582 3,107 6,377 3,353 2,720 304
U.S. citizens and permanent residents, unknown race/ethnicity	1,460	1,080	632	981	615	1,520	934	1,152	1,223
Nonresident aliens ²	478	501	580	639	766	618	721	711	766
	Men								
Total	25,803	25,747	26,449	27,765	27,861	27,503	27,218	27,255	27,439
U.S. citizens and permanent residents,	25,445	25,372	26,015	27,291	27,268	27,019	26,688	26,729	26,900
White, non-Hispanics Asians Underrepresented minorities, total Black, non-Hispanics Hispanics American Indians or Alaskan Natives	22,201 555 1,869 987 800 82	22,135 583 1,991 1,021 891 79	22,719 731 2,184 1,080 1,027	1,010 2,244 1,016 1,147	23,288 972 2,632 1,221 1,298 113	22,283 1,167 2,651 1,269 1,248 134	22,057 1,233 2,816 1,387 1,276 153	21,757 1,266 3,000 1,437 1,407	21,375 1,689 3,096 1,467 1,468 161
U.S. citizens and permanent residents, unknown race/ethnicity	820	663	381	555	376	918	582	706	740
Nonresident aliens ²	358	375	434	474	593	484	530	526	539
					Women				
Total	15,997	17,017	18,004	18,733	18,732	18,817	18,482	19,000	19,616
U.S. citizens and permanent residents, total 1	15,877	16,891	17,858	18,568	18,559	18,683	18,291	18,815	19,389
White, non-Hispanics Asians Underrepresented minorities, total Black, non-Hispanics Hispanics American Indians or Alaskan Natives U.S. citizens and permanent	1,565 871	1,065	15,015 569 2,023 1,170 783	838 2,250 1,264 908	14,974 818 2,528 1,507 908 113	14,463 955 2,663 1,623 943	1,048 2,951 1,745 1,079	14,108 1,172 3,089 1,822 1,136 131	14,207 1,418 3,281 1,886 1,252
residents, unknown race/ethnicity	1	417	251	426	239	602	ı	446	483
Nonresident aliens ²	120	126	146	165	173	134	191	185	227

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

First-professional degrees are defined as those that require at least 6 years of college work for completion and 2 years of pre-professional training. NOTES:

Non-health fields include: Law, Divinity/Ministry, and Rabbinical and Talmudic Studies.

SOURCE: Tabulated by National Science Foundation/Division of Science Resource Studies; data from Department of Education/National Center or Education Statistics: Integrated Postsecondary Education Data System Completions Survey



Nonresident aliens include foreign citizens on temporary visas only.

SECTION C.

CLASSIFICATION OF PROGRAMS



Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
SCIENCE AND ENGINEERING (S&E)	SCIENCE AND ENGINEERING (S&E)	SCIENCE AND ENGINEERING (S&E)
ENGINEERING 14 Engineering	ENGINEERING 14 Engineering	ENGINEERING Aeronautical/Astronautical Engineering 300 Aerospace, Aeronautical, and Astronautical Engineering 312 Chemical Engineering 366 Petroleum Engineering 369 Polymer and Plastics Engineering 547 Fuel Technology and Petroleum Engineering 315 Civil Engineering 316 Environmental Health Engineering 317 Electrical Engineering 318 Communications Engineering 319 Electrical Engineering 320 Electrical Engineering 321 Computer Engineering 322 Electrical Engineering 323 Electronics Engineering 324 Electrical and Electronics Engineering 325 Industrial and Manufacturing Engineering 326 Engineering 327 Engineering Mechanics 347 Mechanical Engineering
	81	



Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
	·	Materials/Metallurgical Engineering 309 Ceramic Sciences 342 Materials Science 348 Metallurgical Engineering Other Engineering 303 Agricultural Engineering 306 Bioengineering and Biomedical Engineering 330 Engineering Physics 333 Engineering Science 351 Mining and Mineral
		Engineering 354 Naval Architecture and Marine Engineering 357 Nuclear Engineering 360 Ocean Engineering 363 Operations Research 372 Systems Engineering 375 Textile Engineering 376 Engineering, General 379 Engineering, Other
SCIENCES	SCIENCES	SCIENCES
NATURAL SCIENCES	NATURAL SCIENCES	NATURAL SCIENCES/ PHYSICAL SCIENCES
Physical Science 40 Physical Sciences (Includes Earth/Atmospheric/	Physical Science 40 Physical Sciences (Includes Earth/Atmospheric/	Astronomy 500 Astronomy 505 Astrophysics
Oceanographic Sciences)	Oceanographic Sciences)	506 Astronomy and Astrophysics
		Chemistry 520 Analytical Chemistry 521 Agricultural and Food Chemistry 522 Inorganic Chemistry 524 Nuclear Chemistry 526 Organic Chemistry 528 Pharmaceutical Chemistry 530 Physical Chemistry 531 Polymer Chemistry
	82 60	534 Theoretical Chemistry



Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
		538 Chemistry, General
		539 Chemistry, Other
		Physics
		560 Acoustics
		561 Chemical and Atomic/ Molecular Physics
		562 Electron Physics
		563 Electromagnetic Physics
		564 Elementary Particle Physics
		566 Fluids
		567 Mechanics
		568 Nuclear Physics
		569 Optics
		570 Plasma and High- Temperature Physics
		572 Polymer Physics
		573 Thermal Physics
		574 Solid State and Low- Temperature Physics
		575 Theoretical Physics
•		578 Physics, General
		579 Physics, Other
		Other Physical Sciences
		599 Physical Sciences, Other
		Atmospheric Sciences
		510 Atmospheric Physics and
		Chemistry
		512 Atmospheric Dynamics
		514 Meteorology
		518 Atmospheric Science/
		Meteorology, General
		519 Atmospheric Science/
		Meteorology, Other
		Geosciences
		540 Geology
		542 Geochemistry
		544 Geophysics and Seismology
		545 Geophysics (Solid Earth)
		546 Paleontology
		548 Mineralogy and Petrology



8³83

Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
		549 Mineralogy, Petrology, and
		Geochemistry
		550 Stratigraphy and
		Sedimentation
		552 Geomorphology and Glacial Geology
		554 Applied Geology
		555 Applied Geology and Geological Engineering
		558 Geological and Related
•		Sciences, General
		559 Geological and Related
·		Sciences, Other 585 Hydrology and Water
		585 Hydrology and Water Resources
		Oceanography
		590 Oceanography
		595 Marine Sciences
		Other Environmental Sciences
		580 Environmental Science
		MATHEMATICAL/COMPUTER
Mathematical Science	Mathematical Science	SCIENCES Mathematics
27 Mathematics	27 Mathematics	420 Applied Mathematics
2) Mathematics	27 Wathernaties	425 Algebra
		430 Analysis and Functional Analysis
		435 Geometry
		440 Logic
		445 Number Theory
		450 Mathematical Statistics
		455 Topology
		460 Computing Theory and Practice
		465 Operations Research
		498 Mathematics, General
	I	499 Mathematics, Other



Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
Computer Science 11 Computer and Information Sciences	Computer Science 11 Computer and Information Sciences	Computer Science 400 Computer Science 410 Information Science and Systems BIOLOGICAL/AGRICULTURAL
Agricultural Science 02 Agricultural Sciences 03 Renewable Natural Resources	Agricultural Science 02 Agricultural Sciences 03 Conservation and Renewable Natural Resources	SCIENCES Agricultural Sciences 005 Animal Breeding and Genetics 007 Animal Husbandry 010 Animal Nutrition 012 Dairy Science 014 Poultry Science 019 Animal Sciences, Other 020 Agronomy and Crop Science 025 Plant Breeding and Genetics 030 Plant Pathology 032 Plant Protection/Pest Management 039 Plant Sciences, Other 040 Food Sciences 042 Food Distribution 043 Food Engineering 044 Food Sciences, Other 045 Soil Sciences 046 Soil Chemistry and Microbiology 049 Soil Sciences, Other 050 Horticulture Science 054 Fish and Wildlife 055 Fisheries Science and Management 060 Wildlife Management 060 Forest Biology 068 Forest Engineering 070 Forest Management 071 Wood Science and Pulp/ Paper Technology 072 Conservation and Renewable Natural Resources 073 Forestry and Related Sciences



Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
		080 Wildlife and Range Management 098 Agricultural Science, General 099 Agricultural Science, Other
Biological Science	Biological Science	Biological Sciences
26 Biological Sciences/Life	26 Biological Sciences/Life	100 Biochemistry
Sciences	Sciences	105 Biophysics
		107 Biotechnology Research
		110 Bacteriology
•		115 Plant Genetics
·		120 Plant Pathology
•		125 Plant Physiology
		129 Botany, Other
		130 Anatomy
		133 Biometrics and Biostatistics
		136 Cell Biology
		139 Ecology
		140 Hydrobiology
		142 Embryology
		145 Endocrinology
		148 Entomology
		151 Biological Immunology
		154 Molecular Biology
	. ↓	156 Microbiology and
		Bacteriology
		157 Microbiology
		160 Neuroscience
		163 Nutritional Sciences
		166 Parasitology
		169 Toxicology
		170 Genetics, Human and Animal
		171 Genetics
		175 Pathology, Human and
		Animal
		180 Pharmacology, Human and
		Animal
		185 Physiology, Human and
		Animal
		186 Animal and Plant Physiology
		189 Zoology, Other
		198 Biological Sciences, General
	I	199 Biological Sciences, Other



Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
SOCIAL SCIENCES	SOCIAL SCIENCES	SOCIAL SCIENCES Economics 000 Agricultural Economics 666 Economics 668 Econometrics
		Political Science 674 International Relations/Affairs 678 Political Science and Government 679 Political Science and Public Administration 682 Public Policy Analysis 976 Public Administration
		Sociology 662 Demography and Population Studies 686 Sociology
Social Science 05 Area and Ethnic Studies 45 Social Sciences	Social Science 05 Area, Ethnic, and Cultural Studies 45 Social Sciences and History	Other Social Sciences 650 Anthropology 652 Area Studies 658 Criminology 670 Geography 690 Statistics 694 Urban Affairs/Studies 698 Social Sciences, General 699 Social Sciences, Other 710 History and Philosophy of Science and Technology 729 Linguistics 770 American Studies 773 Archeology
Psychology 42 Psychology	Psychology 42 Psychology	Psychology 600 Clinical Psychology 603 Cognitive Psychology and Psycholinguistics 606 Comparative Psychology 609 Counseling Psychology 612 Developmental and Child Psychology 613 Human Indiv. & Family Development



Fields of study collected in IPEDS, 1985-91	Fields of study from the IPEDS, 1992–97		elds of study from the Survey of arned Doctorates classification
		825	School Psychology
			(See also 636)
		830	Social/Philosophical
	İ	١.	Foundations of Education
		835	Special Education
		840	Counseling Education/ Counseling and Guidance Services
		845	Education Evaluation and Research
		850	Pre-elementary/Early Childhood Teacher Education
		852	Elementary Teacher Education
		854	Junior High Teacher Education
		856	Secondary Teacher Education
		858	Adult and Continuing Teacher Education
		861	Art Education
		862	Business Education
		864	English Education
	,	866	Foreign Languages Education
		867	Physical Education, Health, and Recreation
		870	Home Economics Education
		876	Music Education
		880	Physical Education and Coaching
		882	Reading Education
		886	Speech Education
		888	Trade and Industrial Education
		889	Teacher Education, Specific Academic and Vocational
		900	Programs, Other
		898	Education, General
	1	899	Education, Other



	Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97		ds of study from the Survey of ned Doctorates classification
			615 616	Experimental Psychology Experimental, Physiological Psychology
			618	Educational Psychology
			619	Human Engineering
			621	Industrial and Organizational Psychology
			624	Personality Psychology
			627	Physiological Psychology/ Psychobiology
			630	Psychometrics
			631	Human Indiv. & Family Development
			633	Quantitative Psychology
			636	School Psychology
			639	Social Psychology
			648	Psychology, General
			649	Psychology, Other
	NON-S&E	NON-S&E	ИОИ	I-S&E
01	Agribusiness and	01 Agricultural Business and	MEI	DICAL SCIENCES
	Agricultural Production	Production	205	Dentistry
	4 1 2 4 4 1	1 04 A 1 '4 4 1 D alaka d		- 1 TT 1/1
04	Architecture and Environmental	04 Architecture and Related	210	Environmental Health
-	Design	Programs	215	Public Health
06	Design Business and Management	Programs 08 Marketing Operations/		Public Health Public Health and
06	Design Business and Management Business (Administrative	Programs 08 Marketing Operations/ Marketing and Distribution	215 219	Public Health Public Health and Epidemiology
06 07	Design Business and Management Business (Administrative Support), Other	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications	215 219 220	Public Health Public Health and Epidemiology Epidemiology
06 07 08	Design Business and Management Business (Administrative Support), Other Marketing and Distribution	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies	215 219 220 225	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery
06 07 08 09	Design Business and Management Business (Administrative Support), Other Marketing and Distribution Communications	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous	215 219 220	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery Optometry and
06 07 08 09	Design Business and Management Business (Administrative Support), Other Marketing and Distribution Communications Consumer, Personal, and	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies	215 219 220 225 235	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery Optometry and Ophthalmology
06 07 08 09 12	Design Business and Management Business (Administrative Support), Other Marketing and Distribution Communications Consumer, Personal, and Miscellaneous Services	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous Services	215 219 220 225 235 240	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery Optometry and Ophthalmology Pharmacy
06 07 08 09 12	Design Business and Management Business (Administrative Support), Other Marketing and Distribution Communications Consumer, Personal, and Miscellaneous Services Education	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous Services 13 Education	215 219 220 225 235 240 250	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery Optometry and Ophthalmology Pharmacy Veterinary Science
06 07 08 09 12	Design Business and Management Business (Administrative Support), Other Marketing and Distribution Communications Consumer, Personal, and Miscellaneous Services	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous Services 13 Education 15 Engineering-Related	215 219 220 225 235 240 250 OTH	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery Optometry and Ophthalmology Pharmacy Veterinary Science HER HEALTH SCIENCES
06 07 08 09 12	Design Business and Management Business (Administrative Support), Other Marketing and Distribution Communications Consumer, Personal, and Miscellaneous Services Education Foreign Languages	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous Services 13 Education 15 Engineering-Related Technologies 16 Foreign Languages and Literatures	215 219 220 225 235 240 250	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery Optometry and Ophthalmology Pharmacy Veterinary Science HER HEALTH SCIENCES Speech/Language Pathology
06 07 08 09 12 13 16 17	Design Business and Management Business (Administrative Support), Other Marketing and Distribution Communications Consumer, Personal, and Miscellaneous Services Education Foreign Languages Allied Health	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous Services 13 Education 15 Engineering-Related Technologies 16 Foreign Languages and	215 219 220 225 235 240 250 OTH 200	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery Optometry and Ophthalmology Pharmacy Veterinary Science HER HEALTH SCIENCES Speech/Language Pathology and Audiology
06 07 08 09 12 13 16 17	Design Business and Management Business (Administrative Support), Other Marketing and Distribution Communications Consumer, Personal, and Miscellaneous Services Education Foreign Languages Allied Health Health Sciences (Including Dentistry, Medicine, Optometry, Osteopathic	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous Services 13 Education 15 Engineering-Related Technologies 16 Foreign Languages and Literatures	215 219 220 225 235 240 250 OTH	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery Optometry and Ophthalmology Pharmacy Veterinary Science HER HEALTH SCIENCES Speech/Language Pathology and Audiology Health Systems/Services
06 07 08 09 12 13 16 17	Design Business and Management Business (Administrative Support), Other Marketing and Distribution Communications Consumer, Personal, and Miscellaneous Services Education Foreign Languages Allied Health Health Sciences (Including Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy,	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous Services 13 Education 15 Engineering-Related Technologies 16 Foreign Languages and Literatures	215 219 220 225 235 240 250 OTH 200 212	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery Optometry and Ophthalmology Pharmacy Veterinary Science HER HEALTH SCIENCES Speech/Language Pathology and Audiology Health Systems/Services Administration
06 07 08 09 12 13 16 17	Design Business and Management Business (Administrative Support), Other Marketing and Distribution Communications Consumer, Personal, and Miscellaneous Services Education Foreign Languages Allied Health Health Sciences (Including Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry or Podiatric	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous Services 13 Education 15 Engineering-Related Technologies 16 Foreign Languages and Literatures	215 219 220 225 235 240 250 OTH 200 212	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery Optometry and Ophthalmology Pharmacy Veterinary Science HER HEALTH SCIENCES Speech/Language Pathology and Audiology Health Systems/Services Administration Hospital Administration
06 07 08 09 12 13 16 17	Design Business and Management Business (Administrative Support), Other Marketing and Distribution Communications Consumer, Personal, and Miscellaneous Services Education Foreign Languages Allied Health Health Sciences (Including Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry or Podiatric Medicine or Chiropody, Veterinary Medicine,	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous Services 13 Education 15 Engineering-Related Technologies 16 Foreign Languages and Literatures	215 219 220 225 235 240 250 OTH 200 212	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery Optometry and Ophthalmology Pharmacy Veterinary Science HER HEALTH SCIENCES Speech/Language Pathology and Audiology Health Systems/Services Administration Hospital Administration Nursing Rehabilitation/Therapeutic
06 07 08 09 12 13 16 17 18	Design Business and Management Business (Administrative Support), Other Marketing and Distribution Communications Consumer, Personal, and Miscellaneous Services Education Foreign Languages Allied Health Health Sciences (Including Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry or Podiatric Medicine or Chiropody, Veterinary Medicine, Chiropractic)	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous Services 13 Education 15 Engineering-Related Technologies 16 Foreign Languages and Literatures	215 219 220 225 235 240 250 OTH 200 212 224 230 245	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery Optometry and Ophthalmology Pharmacy Veterinary Science HER HEALTH SCIENCES Speech/Language Pathology and Audiology Health Systems/Services Administration Hospital Administration Nursing Rehabilitation/Therapeutic Services
06 07 08 09 12 13 16 17 18	Design Business and Management Business (Administrative Support), Other Marketing and Distribution Communications Consumer, Personal, and Miscellaneous Services Education Foreign Languages Allied Health Health Sciences (Including Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry or Podiatric Medicine or Chiropody, Veterinary Medicine, Chiropractic) Home Economics	Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous Services 13 Education 15 Engineering-Related Technologies 16 Foreign Languages and Literatures	215 219 220 225 235 240 250 OTH 200 212 224 230	Public Health Public Health and Epidemiology Epidemiology Medicine and Surgery Optometry and Ophthalmology Pharmacy Veterinary Science HER HEALTH SCIENCES Speech/Language Pathology and Audiology Health Systems/Services Administration Hospital Administration Nursing Rehabilitation/Therapeutic



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		18	Health Professions and Related	HIS	TORY	
			Sciences (Including	700	History, American	
		1	Dentistry, Medicine,	705	History, European	
			Optometry, Osteopathic	718	History, General	
		İ	Medicine, Pharmacy,	719	History, Other	
			Podiatry or Podiatric	' '	Tilbiory, Other	
		İ	Medicine or Chiropody,	ENC	GLISH AND LITERATURE	
			Veterinary Medicine,	720	Classics	
		İ	Chiropractic, Allied Health)	723	Comparative Literature	
		19		725	English and American	
		20	Vocational Home Economics		Literature	
22	Law	22	Law and Legal Studies	732	Literature, American	
23	Letters	23		733	Literature, English	
			Literature/Letters	734	English Language	
24	Liberal/General Studies	24	Liberal/General Studies	736	Speech and Rhetorical	
25	Library and Archival	25	Library and Archival		Studies	
	Sciences	j	Sciences	738	Letters, General	
28	Military Sciences	28	Reserve Officer Training Corps	739	Letters, Other	
29	Military Technologies		(ROTC)		•	
		29	Military Technologies	FOR	REIGN LANGUAGES	
30	Multi-/Interdisciplinary Studies	30	Multi-/Interdisciplinary Studies	740	French	
31	Parks and Recreation	31	Parks, Recreation, Leisure, and	743	German	
		i	Fitness Studies	746	Italian	
	Philosophy and Religion	38	Philosophy and Religion	749	Spanish	
39	Theology	39	Theological Studies and	752	Russian	
			Religious Vocations	755	Slavic (Other than Russian)	
41	Science Technologies	41	Science Technologies	758	Chinese	
44	Public Affairs (Does not include	43	Protective Services	762	Japanese	
	Parks and Recreation	44	Public Administration and	765	Hebrew	
	Management, and Law		Services (Does not	768	Arabic	
	Enforcement and		include Parks and	769	Other Languages and	
42	Correction)		Recreation Management,		Literature	
43	Protective Services		and Law Enforcement and			
4.		46	Correction)	OTH	IER HUMANITIES	
46	Construction Trades	46	Construction Trades	785	Philosophy (See also 440)	
47	Mechanics and Repairers	47	Mechanics and Repairers	798	Humanities, General	
	Precision Production	48	Precision Production Trades	799	Humanities, Other	
49	Transportation and Material	49	Transportation and Materials			
50	Moving	50	Moving Workers	REL	IGION AND THEOLOGY	
JU	Visual and Performing Arts		Visual and Performing Arts	790	Religion (See also 984)	
		52	Business Management and	791	Religion and Theology	
	<u>.</u>		Administrative Services	984	Theology/Religious Education	
	·				(See also 790)	



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		BUSINESS AND MANAGEMENT 002 Agricultural Business and Management 900 Accounting 905 Banking/Financial Support Services 910 Business Administration and Management 915 Business/Managerial Economics 917 Management Information Systems/Business Data Processing 920 Marketing Management and Research 925 Business Statistics 930 Operations Research (See also 363, 465) 935 Organizational Behavior (See also 621) 938 Business Management/ Administrative Services, General 939 Business Management/ Administrative Services, Other
		INFORMATION FIELDS (JOURNALISM, BROADCASTING, LIBRARIANSHIP) 940 Communications Research 945 Journalism 947 Mass Communications 950 Radio and Television 957 Communication Theory 958 Communications, General 959 Communications, Other 972 Library Science
	91	LAW 968 Law



Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
		SOCIAL SERVICE PROFESSIONS 980 Social Service Professions
		VOCATIONAL STUDIES AND HOME ECONOMICS 964 Home Economics
		OTHER NON-SCIENCE FIELDS 974 Parks/Recreation/ Leisure/ Fitness 988 Professional Fields, General 989 Professional Fields, Other





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